LISTENING AND NOTETAKING SKILLS

# Advanced Listening Comprehension

Third Edition



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### International Student Edition

# ADVANCED LISTENING COMPREHENSION

# Developing Aural and Notetaking Skills

Third Edition

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#### International Student Edition

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#### To The Teacher

Advanced Listening Comprehension. **Third** Edition is a complete listening and notetaking skills program for advanced level students of English as a second or foreign language. Lectures and readings on topics of universal interest in the fields of Anthropology, History, Sociology, Communication, and Biology provide stimulating, content-based springboards for developing comprehension, notetaking, and academic study skills.

Advanced Listening Comprehension, **Third** Edition is one in a series of academic listening and notetaking publications. The complete program has been designed to meet the needs of students from the intermediate through the advanced levels and includes the following:

Intermediate Listening Comprehension intermediate
Noteworthy high intermediate
Advanced Listening Comprehension advanced

A new feature added to the third edition of *Advanced Listening Comprehension* is a video component. The orientation lecture for each chapter is now available on DVD or VHS. The video is meant to be used as a complement to the traditional audio program. Students may opt to view the orientation listening of a chapter on video in order to simulate a more authentic classroom listening and notetaking experience.

### Pedagogical Overview

# I. Research on the Effect of Notetaking on Lecture Learning, and Learners' Beliefs about the Usefulness of Notetaking

In a study of 234 English as a second language (ESL) learners at four universities in the United States about the importance of taking notes as they listened to TOEFL-like lectures in English, Carrell, Dunkel, and Mollaun (20021 reported that students' responses suggest that the learners: (I) felt a level of comfort and ease from being allowed to take notes while listening to lectures, (2) believed notetaking aided performance in answering questions about the lectures, and (3) judged that their recall of information was positively influenced by being allowed to take notes. In fact, 67 percent agreed that notetaking helped them answer the questions better than if they were not allowed to take notes; 75 percent agreed that notetaking made it easier to remember the information from the lecture; and 63 percent felt more at ease when they were allowed to take notes during lecture learning. In addi-

tion, the researchers found that those who listened and took notes on mini-lectures in the arts and humanities did better on an information-recall test than those who were not allowed to take notes. Although much more **research** needs to be done on the effect of notetaking on lecture learning, the **research** by Carrell, Dunkel, and Mollaun does suggest that notetaking is an important strategy that ESLlearners need to acquire if they are going to be asked to listen to and absorb information from lecture-type speech.

# II. Focus on Developing Academic Listening Comprehension . Proficiency: Models of Noninteractive and Interactive Lectures

The lecture method of instruction pervades institutions of higher learning in North America and in many areas throughout the world. It is considered to be a cost-effective method of instruction and "the most dramatic way of presenting to the largest number of students a critical distillation of ideas and information on a subject in the shortest possible time" [Elsen, cited in Gage and Berliner, 1984, p. 454). Not only do many students encounter the lecture method of instruction during university life, but more and more students across the globe are experiencing lectures given in English. As Flowerdew (1994) observes, as a result of the spread of English as an international language, increasing numbers of people are studying at the university level through the medium of English, whether in their own country or in English-speaking countries as international students. He notes, further, that a major part of the university experience of these domestic and international students involves listening to lectures and developing academic listening skills. "Academic listening skills are thus an essential component of communicative competence in a university setting" [Plowerdew, 1994, p. 7).

Buck (2001), Dunkel 11995), Dunkel and Davis (1994), Flowerdew (1994), Mendelsohn and Rubin (1995), Richards (1983), and Rost (1990) have contributed a substantial amount of knowledge to the growing body of literature on what constitutes and fosters proficiency in academic listening, as well as conversational listening. In his scholarly book Academic Listening: Research Perspectives, Flowerdew, for example, identifies a number of the most distinctive features of academic listening, pointing out that one of the most **significant** features that distinguishes academic listening from conversational listening is the lack (or relatively rare use) of turn taking in academic listening. "In conversation, tum-taking is obviously essential, while in lectures turn-taking conventions will only be required if questions are allowed from the audience or come from the lecturer" (p. 11). As a result, the lecture listener may have to listen with concentration for long stretches of time without having the chance to take a turn to speak during the lecture presentation. In other words, the listener must develop the ability "to concentrate on and understand long stretches of talk without the opportunity of engaging in the facilitating functions of interactive discourse, such as asking for repetition, negotiating meaning,

then given the chance to become the lecturer and to recap the lecture from the notes taken on the lecture.

## III. Focus on Developing Notetaking Skills: Providing Opportunity to Develop the Ability to Select and Encode Information in Notes

In addition to contrasting the difference in turn-taking conventions associated with academic and conversational styles discussed previously, Flowerdew (1994) points out that conversational and academic listening differ one from the other in terms of the listener's desire to take notes on the information heard. To do so, the listener needs to engage in a five-stage process: he or she must "decode, comprehend, identify main points, decide when to record these, write quickly and clearly" (Flowerdew, 1994, p. 11). Lecture **notes** are usually taken and stored in notebooks for study-and-review purposes. In their article titled "Second Language Listening Comprehension and Lecture Note-taking," Chaudron, Loschky, and Cook (1995) underscore the importance of this external storage function of lecture notes. The structure and format of Advanced Listening Comprehension, Third Edition reinforces the importance of this external storage function of the notes taken since the students must use the notes taken during the lectures to respond to short-answer and essay examination questions given several class sessions following delivery of the lecture. Advanced Listening Comprehension, Third Edition also gives students the chance to develop their individual notetaking approaches and styles, though it provides some guidance in the form of the notetaking mentor who interrupts the lecture to provide students with additional time to write down information, to fill in information missed, and to signal some of the major global ideas and details contained in the information heard.

# IV. Focus on Developing General Communication Skills: Broadening the Base of Skill Development

Although development of academic listening comprehension proficiency and notetaking skills is the chief objective of the instructional program of Advanced Listening Comprehension, Third Edition, it is not the exclusive goal of the program. The authors recognize that advanced ESL students are not just "information sponges." They are much more than that. In addition to obtaining and absorbing information and knowledge, they also function as users and creators of information and knowledge. Furthermore, they react to information learned, often in discussion of issues with peers. In addition, during their university days, students not only *listen* to obtain and learn information, they also read to acquire information, and they discuss and react to the information gained via both their ears and eyes. Occasionally, they are expected to give oral reports in class and to participate in study groups (see Mason, 1994). Upon occasion, they are required to interact after class with their instructors, or if they are teaching assistants, to interact with their students. They commonly interact with their peers. A student might, for example, be asked by a

peer who was absent from a lecture to provide him or her with a synopsis of the lecture or a summary of the reading assignment given by the professor. The students might also be asked to evaluate or to react to the information presented. Advanced Listening Comprehension, Third Edition seeks, therefore, to help students not only grasp, comprehend, and store information they have heard and read, but also to construct and share information through speaking and writing. It provides students an opportunity to read information related to (but not precisely the same as) the topies of the lectures, and it requires the learner to discuss issues in oral exchanges and/or written communication.

#### V. Summary Goals

In brief, the goals of Advanced Listening Comprehension, Third Edition are primarily threefold: (I) to help students build their academic listening comprehension proficiency in English, (2) to assist them in developing or improving their English-lecture notetaking skills; and (31 to enhance their ability to read and discuss information and issues related to the general and/or specific topics contained in the lectures heard. These goals are achieved, we trust, with the aid of the instructional design of the units and the eclectic approach outlined below.

#### The Instructional Design of Each Unit

#### I. Chapters

- A. Proverbs and Wise Sayings Students read proverbs and sayings to ponder and/or discuss general and specific meanings, as well as relevance.
- B. Prelistening Students read a short introduction to and synopsis of the focus and content of the information contained in the lecture.
- C. Think About This Students answer one or two questions to anticipate content and to share experiences and feelings evoked by the questions.
- D. Types of Information Presentations and Delivery Styles Students listen to three models of the lecture on the topic with different task requirements for each model.
  - 1. The Orientation Listening Model: Students get oriented to the structure and content of the lecture and build background knowledge (the lecture is scripted and representative of broadcast style).
  - 2. The Listening and Notetaking Model: Students listen to the lecture with mentoring support for notetaking (the lecture is scripted with elements of redundancy provided, and is given at a slightly slower speed than that of the Orientation Listening).

- 3. **Listening** to a Recounting of the Lecture: Students listen to a recounting of the lecture by a student; the notes taken by the listener can be checked for accuracy and completeness during the presentation; the style includes characteristics of more extemporaneous presentations, including use of redundancies, paraphrases, verbal fillers [for example, "uhmrnm," "errr"] repetitions, corrections, and so forth in the speech).
- E. Recapping the Lecture from Your Notes Students recap the lecture from the notes they have taken.
- F. Reading Expansion Students read authentic material (for example, a newspaper article, a segment of a book, a research project, and so forth] on a related topic.
- G. Discussing Information and Issues Students discuss and react to the issues by responding to questions related to the topic.
- H. Journal Writing Students maintain a written journal in which they write about topics and issues of interest or concern to them.
- L Research Project Students do research to find out more about the lecture topic or a related topic. They prepare a paper or presentation on the information that they find.

#### II. Unit Exam

A. Information Recognition/Recall **Exam** Students answer short-answer questions and essay-type questions using the notes they took on the lecture. The storage function of the notes is emphasized in this component of the listening and notetaking program. Students are also asked to construct a number of test questions to give fellow students and peers. Students, thus, participate in test construction and information checking in individual ways.

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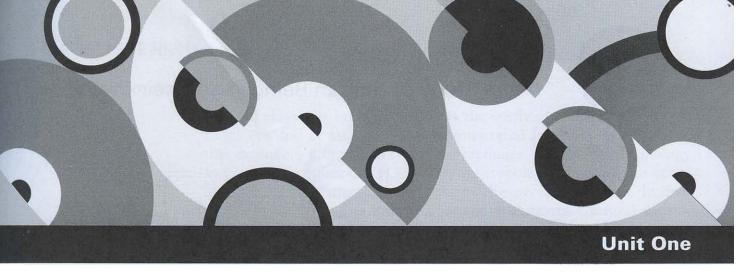
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# Anthropology: The Evolution of Human Endeavor

Chapter 1

**Anthropology:** 

The Study of Human Beings and Their Creations 2

Chapter 2

The Concept of Culture:

**Understanding One Another 9** 

# THINK ABOUT AND DISCUSS THE MEANING OF THE FOLLOWING QUOTATION:

If we are to achieve a richer culture, rich in contrasting values, we must recognize the whole gamut of human potential, and so weave a... fabric... in which each diverse human gift will find a fitting place.

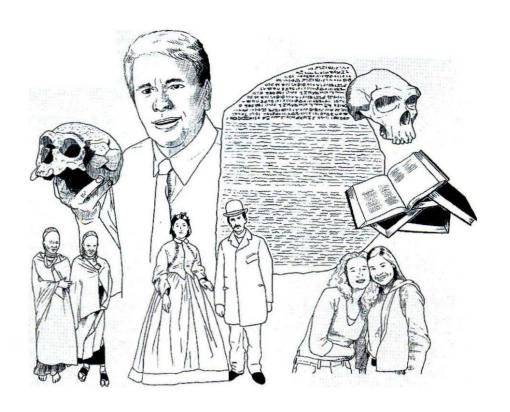
**—Margaret** Mead (1901-19781

American Anthropologist



## **Anthropology:**

### The Study of Human Beings and Their Creations



# THINK ABOUT AND DISCUSS THE MEANINGS OF THE FOLLOWING QUOTATIONS:

The awe and dread with which the untutored savagecontemplates bis mother-in-law are amongst the most familiar facts of anthropology.

-Sir James George Frazer (1854-1941)

Scottish Anthropologist

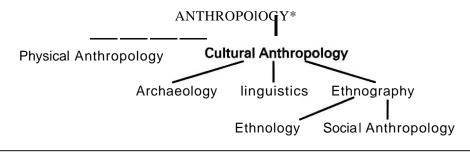
Almost [all] of our actions and desires [are] bound up with the existence of other human beings.

**—Albert Einstein** (1879-1955)

American Theoretical Physicist

#### A. Preview of the Content

Anthropology has been described as the study of human behavior in all places and at all times. As demonstrated in the diagram below, this extensive subject has two main branches: physical anthropology and cultural anthropology. Physical anthropology, according to noted anthropologist George Kneller, traces the evolution of the human organism and its adaptation to various environments. Cultural anthropology is the study of cultures, past and present. It includes the fields of linguistics, archaeology, and ethnology, all of which will be explained. Anthropology, like history, helps humankind find answers to the many problems facing our natural and political environments. It also helps explain how we have developed as physical and social beings, both positively and negatively.



<sup>&#</sup>x27;The subfields of Anthropology

In this chapter you will learn about the multifaceted field of anthropology-the classroom of which is the entire world.

#### B. Think about This

Anthropology is among the younger fields of social science. Its range of subject matter covers human behavior in all places and at all times. And most important it covers all aspects of humanity: biological, psychological, social, and historical. During the lecture, think about the strengths and weaknesses of such a great scope of study. Where does anthropology leave off, and fields such as history, religion, psychology, and so on, begin?

## **A**. Orientation Listening

As you listen to the lecture for the first time, use the outline below to help you follow and understand the general content and the topics discussed. This outline should help you perceive the overall structure of the lecture and the main ideas presented by the lecturer.

- I. Introduction: What is anthropology?
  - A. Word in English language for centuries
  - B. "The study of human beings"
  - C. Paul Bohannan on definition of human
  - D. Barbara Miller: misconception of anthropologist's role
- II. Anthropology developed in the West
  - A. Relatively late science
  - B. Early Greek and Roman scholars interested in ideal society
  - C. Age of exploration and study of non-Western people

#### III. Subfields of anthropology

- A. Physical anthropology: study of the development of humans
  - 1. Subfield is genetics
  - 2. Related subjects are anatomy, biology, and paleontology
- B. Cultural anthropology: study of learned behavior in human societies
  - Specialists limit studies to a few geographical areas (Margaret Mead-Samoa; Clyde Kluckhohn-Navajo in SWU.S.)
  - 2. Kluckhohn's *Mirror* for Man a classic
- C. Cultural anthropology has several subfields
  - 1. Archaeology-study of culture through material sources
  - 2. Linguistics-study of language as communication
  - 3. Ethnography: ethnology and social anthropology-describing of human societies
- D. Psychological anthropology
  - 1. Influenced by personality and personal feelings
  - 2. Related subjects are psychology and psychiatry

#### IV. Cultural universals

- A. Similarities in human biology
- B. Two sexes
- C. Education-formal and informal

#### V. Applied anthropology

- A. Helping to plan the future
  - 1. Jobs: was teacher or museum curator-now also in urban planning, health care, international development
- B. Predicting the direction of the human species

## **B.** Listening and Notetaking

Now that you've listened to the lecture once, listen again and take notes. The lecturer will present a slower-paced version of the lecture and will reiterate information so you will have time to take down the information in note form. You will be assisted in your notetaking by a notetaking mentor who will ask you to check that you wrote down important information. You may wish to review the outline before you begin your notetaking.

## $oldsymbol{\Omega}$ C. Listening to a Recounting of the Lecture

Listen to a student recount the lecture. The student will speak in a more informal, spontaneous style, paraphrasing and summarizing the information in the lecture. As you listen, check to be sure that your notes are complete.

#### III. POSTLISTENING

#### A. Recapping the Lecture from Your Notes: Presenting the Information Orally

Recount the information you heard in the lecture to a partner, the class, or your teacher. Use your notes to help you relate the main ideas as well as the supporting information that you heard in the lecture.

#### B. Discussing Information and Issues Presented in the Lecture

In a group of two to four students discuss the following questions. Your teacher may ask you to address one of the questions or all of them. During your discussion, use the information in your notes to support your ideas. At the end of the discussion, a representative from the group should summarize the group's discussion for the class.

- 1. What are the two main branches of anthropology? Explain each of them.
- 2. Identify the subfields of cultural anthropology. Have you taken courses in any of them?
- 3. Give an example of the subject of an ethnography.
- 4. What are three universals common among all societies?
- 5. State the role of education in every society.
- 6. Can you think of ways that applied anthropology is useful in your community?
- 7. What was the principal role of the anthropologist and how is that role changing?

#### IV. READING EXPANSION

#### A. Reading an Excerpt from a Book

Now you'll be reading a book excerpt on the beginnings of agriculture and urbanism. This excerpt is from a book in the *Essential Series on Anthropology* called *Anthropology: Shaping Culture and Society*. The passages in this book are meant for use as a review and study guide for anthropology.

#### The Beginnings of Agriculture and Urbanism

Tool making began about 3 million years ago. Most important to tool making at this time was stone-s-thus the term "Stone Age." The first part of this Stone Age is called the **Paleolithic or Old Stone Age.** 

Hunting, which had sustained human beings throughout the Paleolithic or Old Stone Age, became a less secure proposition as the environment changed following the retreat of the fourth glacier. The disappearance of the great "Ice Age" mammals forced people to find other means of support. Around 15,000 years ago, people began to settle in more or less permanent territories, and to turn to intensive **foraging** as a food-getting technique.

Ultimately, the collecting of wild plants and the hunting of small animals led to the domestication of plants and animals. The best known of the foraging culture was the **Natufian**, centered in the Middle East. This culture is part of the **Mesolithic or Middle Stone Age**.

Domestication of plants and animals developed gradually-and probably in several different places independently-as responses to the need to ensure a more steady food supply. Both Old and New World people were involved in this shift. Domestication may have begun with weeding and caring for wild patches of desired plants. It ultimately progressed to the deliberate planting of crops where and when they were needed.

Current evidence suggests that this process began in lightly forested upland grassy areas. It later moved into arid river valleys as the techniques of irrigation were mastered. The development of agriculture marks the **Neolithic or New Stone Age. In** addition to the domestication of plants and animals, the "Neolithic Revolution" included the following traits:

- 1. growth of permanent villages,
- 2. extension of trade.
- 3. development of pottery, basketry, weaving, and
- 4. the beginning of full-time specialized labor, since sufficient food could be produced by a farming class, freeing other members of the community to do the other things, such as make tools, or engage in specialized ritual activities, or in trade.

In the irrigated river valleys, an intensively productive agrarian economy emerged, and by 5,000-7,000 years ago, cities were growing as centers of trade, government, and ritual. These cities were ringed and supported by the farming villages. Major Old World valleys in which civilization flourished were the TIgris-Euphrates (Mesopotamia), the Nile (Egypt), the Indus (India), the Yellow (China), and the Mekong (Southeast Asia). In the New World, agriculture and later, civilization, arose in the Valley of Mexico and in the valleys of the Andes in South America.

Civilization literally means the culture associated with the growth of cities. With the spread of civilization and the development of literate, metal-based culture, subsequent developments in human chronology are generally treated by historians rather than anthropologists. At this point they turned from the question of what happened in prehistory to the question of how eulture works.

From Anthropology: Shaping Culture and Society by Michael V. Angrosino, copyright © 2002 by REA, Research and Education Assn. All rights reserved. Reprinted with permission of REA, Research and Education Assn.

#### B. Discussing Information and Issues Presented in the Reading

- 1. What was most important to tool making during the Paleolithic period!
- **2.** What is another name for this period!
- 3. Describe the Mesolithic Age.
- 4. With a partner, discuss the activities of the Neolithic Age.
- 5. On a world map locate the major valleys mentioned in the reading where civilizations developed.
- 6. Note the writer's definition of *civilization*. Discuss with your partner or group, what else you would include in this description.

#### **Journal Writing**

Respond to one of the **following** questions in your journal.

- 1. Write a brief ethnography of your childhood neighborhood based on your personal observations. Be sure to include a description of the daily life as you remember it.
- 2. Briefly compare several similarities and differences between your culture and that of a neighboring country.
- 3. From what sources have you learned the most about other cultures! Give some specific examples. Do you think they are factual!

#### **Research Project**

Individually or with a partner, find a current newspaper or magazine article on the discovery of a fossil form or anthropological discovery. Write up the details for a short presentation to the class.

Be sure to include the fo).lowing:

- What is the source of your information!
- Under which branch of anthropology does the discovery fall!
- Who sponsored the research or expedition of the finding!
- What are the significant details (who! what! where!) of the finding!



# The Concept of Culture: Understanding One Another



# THINK ABOUT AND DISCUSS THE MEANINGS OF THE FOLLOWING QUOTATIONS:

In small societies children learn by imitating their parents, relatives and neighbors. In our huge society we use our mass entertainments to instruct our children on how they should express their emotions and what values they should have.

-Margaret Mead (1901-1978)

American Anthropologist

Culture and society imply each other for without living together [people] cannot create a culture or way of life, and without a way of life they cannot live together.

-Educational Anthropology: George Kneller (1908-1999)

**Educational Anthropologist** 

Difference of habit and language are nothing if our aims are identical and hearts open.

-Harry Potter and the Goblet of Fire: J. K. Rawling (1965-1

English Author

#### A. Preview of the Content

This lecture, like the previous one on anthropology, should help you better understand people who are **different** from you or who, on the surface, seem different. It involves a discussion of culture-a word we often use perhaps without really understanding the immense number of variables involved in the concept of culture.

Cultural anthropology, one of the two main branches of anthropology, offers fascinating insights into our own culture as well as into other societies. Also presented are some of the reasons for studying cultural anthropology and the skills needed to nurture and support intercultural communication.

#### B. Think about This

Think of the many ways we use the word *culture*. What is your working definition of the word! Does it include shared activities, learned and shared ideas, and artifacts such as cars, houses, and monuments! Do you realize that you were probably educated to perpetuate the culture of your particular society! Were you educated to maintain the status quo or to make social changes! How curious are you about other cultures! Do you know students from other cultures! Do you associate with them outside of classes! In what ways, if any, do you seem different!

### **A**. Orientation Listening

As you listen to the lecture for the first time, use the outline below to help you understand the general content of the lecture and the topics discussed. The outline should help you perceive the overall structure of the lecture and the main ideas presented by the lecturer.

- I. The definitions of culture
  - A. Murdock's list of 900 categories
  - B. Tyler's "grocery list"
  - C. Learned, socially transmitted behavior
- II. What is a particular culture?
  - A. A total shared way of life
  - B. Includes way of thinking, acting, and feeling
  - C. Language
  - D. Concrete things: archaeology
- III. Why study cultural anthropology?
  - A. R. Benedict: to understand history of cultural growth
  - B. To learn and use a foreign language effectively
- IV. Seelye's six skills for intercultural communication
  - A. Curiosity and empathy
  - B. Role expectations and social variables
  - C. Cultural conditioning and how people act
  - D. Situational and social conventions
  - E. Each society's rules to satisfy needs
  - F. Truth vs. generalizations about different cultures
- V. Coexistence of culture and society
  - A. Most large societies: multicultural or pluralist
  - B. Subcultures
  - C. Equal importance of cultural similarities and differences
- VI. Universals among cultures
  - A. Rewards and punishments in educational systems
  - B. Withholding of certain information from young
  - C. Education by controlling group to stay in power
- VII. Edward Sapir: the role of the individual to think, act, dream, and revolt

## **B.** Listening and Notetaking

Now that you've listened to the lecture once, listen again and take notes. The lecturer will present a slower-paced version of the lecture so you will have time to take down the information in note form. You will be assisted in your notetaking by a notetaking mentor who will ask you to check that you wrote down important information.		

## $\Omega$ C. Listening to a Recounting of the Lecture

Listen to a student recount the lecture. The student will speak in a more informal, spontaneous style, paraphrasing and summarizing the information in the lecture. As you listen, check to be sure that your notes are complete.

#### **III. POSTLISTENING**

#### A. Recapping the Lecture from Your Notes: Presenting the Information Orally

Recount the information you heard in the lecture to a partner, the class, or your teacher. Use your notes to help you relate the main ideas as well as the supporting information that you heard in the lecture.

#### B. Discussing Information and Issues Presented in the Lecture

In a group of two to four students, discuss the questions below. Your teacher may ask you to address one of the questions or all of them. During your discussion, use the information in your notes to support your ideas. At the end of the discussion, a representative from the group should summarize the group's discussion for the class.

- 1. After listening to the lecture, do you find *culture* difficult or easy to define?
- 2. List four or five cultural "generalizations" that foreigners may have about your country.
- 3. What are the three stages of cultural growth?
- 4. What are some substages of cultural growth such as fighting for territory, and so forth? Explain.
- 5. Define cultural anthropology.
- 6. Why is "understanding" a foreign culture necessary when learning another language?
- 7. From your notes recap and compare Seelye's six skills for multicultural or cross-cultural communication.
- 8. In the concept of culture, what is the role of a society?
- 9. What universals common to all cultures are mentioned?
- 10. List two or three more universals.
- 11. How important is the individual according to Sapir?
- 12. Agree or disagree that the concept of culture will continue to be argued about. Support your opinion with an example.

#### IV. READING EXPANSION

#### A. Reading a Briefing

You are going to read a briefing on a topic related to cultural anthropology. This briefing was written by an anthropology student for a class project. A briefing is a concise, or abridged article. It contains only the information that is essential for a reader to gain an understanding of a topic or matter.

This briefing is about a small tribe of people called the Tasaday. In 1971, the Tasaday drew an enormous amount of attention and were visited and written about by a number of anthropologists and journalists. Some scholars even went so far as to say that their discovery was "one of the most significant anthropological events of the twentieth century."

What anthropologists must always remember is that the authenticity of any discovery or claim by other scholars or scientists requires careful scrutiny and verification. As the briefing emphasizes, the actual facts concerning the Tasaday are still in doubt.

Think about these questions before you read the selection. As you read the selection, look for the answers. Use a highlighter to highlight the answers when you find them.

- 1. Look at the title of the selection. Why do you think it has a question mark?
- 2. Look at the subheads in the selection. Explain what you think the subheads, "Capping the Lid on the Whole Incident" and "Blowing the Lid off the Whole Incident," mean.
- 3. Locate Mindanao on the map.
- 4. Explain the term *indigenous*.
- 5. What is the PANAMIN organization? What do you suppose was its mission in the Philippines?
- 6. What part of the Tasaday discovery is a hoax and what aspects are real?
- 7. Now read and study the article and illustrations. Discuss the information after you finish. What connection does this information have with the lecture?

#### **B.RIEFING ON**

#### THE TASADAY HOAX?

Prepared by Regina Hatcher

The Century's Greatest Discovery?



The Philippines with Mindanao near the bottom, the location where the Tasaday were "discovered" in the rainforest.

On June 7, 1971, a PANAMIN exploration team (Presidential Assistance on National Minorities) and its secretary, Manuel Elizalde Jr. were able to make an initial contact by helicopter with an unknown Filipino people who inhabit a vast forested area in the rugged mountainous interior of South Cotabato Province in Mindanao, Philippines. One of PANAMIN's chief responsibilities was the pro-

tection of the Philippines' ethnic minorities, some 44 tribal groups.

The discovery of these people was of great scientific interest, particularly to the studies of man's cultural and technological development, for they are food gatherers whose own technology is still based upon the use of stone tools. Some scholars said contacting the Tasaday was one of the most significant anthropological events of the 20th century.

#### Or a Fantastic Hoax?

Or could it be a brilliantly sinister scheme by then Philippine President Ferdinand Marcos and a Harvard grad to fool the world, gain fame, and steal timber and gold worth billions . . . the biggest anthropological fraud since the Piltdown Man. (The alleged bones of this early species of man were discovered between 1909 and 1915 but proved in 1953 to be a forgery.)

Manuel Elizalde Jr. died in May 1997. He was a wealthy Harvard-educated Filipino, who perpetrated what may have been one of the biggest anthropological hoaxes in history. In 1971, Elizalde introduced the world to a tiny group of peace-loving, Stone Age food gatherers, isolated hundreds of years in a Philippine rainforest, that he claimed had no contact with Westerners.



Among the most fascinating discoveries about the Tasaday was that they still used stone tools, demonstrating their isolation.

#### The Discovery

Elizalde made contact with the Tasaday through a tribal frontiersman named Dafal, who reportedly had met them many years earlier on a hunting foray with his father into the deep interior of the forest. The forest was generally avoided by most tribespeople who believed it was the domain of evil spirits and savage beasts. Dafal eventually brought the Tasaday bits of metal and cloth in return for a choice forest vine and for helping watch his traps.

#### Who Are the Tasadays?

Based on a few hours of observations and working with interpreters, anthropologists concluded that the Tasadays are a real people who had been isolated geographically and culturally for around 2,000 years. Through translators from nearby tribes who understood some of their unusual dialect, the Tasaday said the dense, uncharted forest and caves had been their home as far back in time as any knew. Several Tasaday adults tied their hair back with vines to make pony tails. Unloosed, it hung waist length. The tallest men stood about five feet tall, the women a bit less. Their dirt-smudged bodies were lean and supple and they said their stapie foods were vam-like roots, fruits, nuts, and small fish, crabs, and tadpoles from the forest streams. The population numbered 7 men, 6 women, and 14 children.

#### The World Meets the Tasaday

Elizalde had a tree-top helicopter pad erected near the Tasaday caves, monitored access from outsiders and, although he may have cautioned that scientific studies should not jeopardize the Tasadays long-sheltered lifestyle, an international media carnival ensued.

The Tasaday were immediately filmed by a National Geographic team, with CBS screening their documentary, *The.Lest Tribes of Mindanao*, on Jan. 12, 1972. Within a month of Elizalde breaking the story, he created a PANAMINjU.S. Foundation and

elicited celebrities like Charles Lindbergh and John Rockefeller IV as incorporators.

#### Capping the Lid on the Whole Incident

During the crest of publicity in 1972, President Marcos declared about 19,000 hectares of land reserved for the Tasadays and subsequently imposed martial law on the Philippines. Under such political conditions, the Tasaday story was carefully orchestrated and diverse criticisms on their authenticity was blacked out or ignored. No one had time to really do an exhaustive and scientific study on the Tasaday.

#### Blowing the Lid off the Whole Incident

The ouster of Marcos in 1986 provided opportunity to visit the fabled Tasaday. In April 1986, Swiss anthropologist and journalist Oswald Iten, accompanied by Joey Lozano, a journalist from South Cotabato, made the first unauthorized investigation to the Tasaday caves and found them deserted. What they documented was long-standing PANAMIN manipulation of local Tboli and Manobo peoples, who were first abused in 1971, to live in the caves in order to create a false image of cave-dwelling, Stone-Age people. Lozano knew people in the region never believed the Tasaday were authentic. One of his interviews reported that a Tholi tribesman maintained radio contact with Elizalde and transported rice and other food stuffs for those posing as Tasaday.

We didn't live in caves, only near them, until we met Elizalde... Elizalde forced us to live in the caves so that we'd be better cavemen. Before he came, we lived in huts on the other side of the mountain and we farmed. We took off our clothes because Elizalde told us to do so and promised if we looked poor that we would get assistance. He gave us money to pose as Tasaday and promised us security from counter-insurgency and tribal fighting.

#### Conclusion

Elizalde fled right after the Aquino assasination in 1983, the first of the Marcos cronies to

leave the Philippines. PANAMIN staff indicated that millions from their treasury went with Elizalde, bankrupting the organization. Elizalde ended up in Costa Rica, squandered all the money, got hooked on drugs, and died destitute.

The Tasaday story is a hoax, but the indigenous people involved are real and their exploitation has become one of the reasons why indigenous peoples in the Philippines are now struggling to retain or regain their land, resources, and self-determination.

#### References

The Gentle Tasaday, by John Nance. Harcourt, Brace Jovanovich, Inc., 1977

Nance was an AP reporter based in Manila, Philippines, who reported in this book his encounter with the Tasaday (focus on the first three years).

Further Studies on the Tasaday. by Douglas E. Yen and John Nance, Panamin Foundation, 1976

Collection of six papers providing data and insight into the lives and environment of the Tasaday.

The Tasaday Controversy: Assessing the Evidence, by Thomas N. Headland, American Anthropological Association, 1992

A special publication of the AAA. Papers from a special session held during the 88th annual meeting of the AAA.

Where Tboli Bells Toll: Political Ecology Voices Behind the Tasaday Hoax, by Levita Duhaylungsod, IWGIA, 1993

Political ecology discussions behind the Tasaday hoax.

Food, Ecology and Culture, by J. R. K. Robson, Gordon and Breach Science Publishers, 1980

Food, Ecology Study of the diet of SE Asian cultures, including the Tasaday, and its implications.

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#### B. Discussing Information and Issues Presented in the Reading

- 1. What exactly was the supposed hoax?
- 2. Who were the people that might have been responsible for the hoax?
- 3. Describe the Tasaday. How tall were they? How did they dress?
- 4. At first did everyone believe the Tasaday were authentic? Do people still believe that the Tasaday are authentic?
- 5. What did President Marcos do for the Tasaday people?
- 6. What were the Tasaday supposedly forced to do by Manual Elizade?
- 7. Explain the term *indigenous*. What are *indigenous* peoples in the Philippines struggling to do today?
- 8. Based on the reading, do you have any thoughts about the authenticity of the Tasaday? How could you find out more information about them?
- 9. Who was the Piltdown Man? What do you know about this anthropological fraud, and where could you find out more information?

#### **Journal Writing**

Respond to the following in your journal: Write down some of the conceptions you have about the people of your **own** country and culture. Then list some of the general misconceptions you think foreigners might have about your country.

#### **Research Project**

#### Case Study

Choose three students from this or another class for a case-study project. From each of your subjects, get the answers to the following questions.

- 1. In what ways have you changed since you began your studies in another country/region?
- 2. What do you like most about your student experience?
- 3. What do you like least?
- 4. In what ways has language been a problem!
- 5. Have you acquired more confidence in your use of English!

Compile and explain the results in a research study format. Be sure to include the following information.

- Home country/region of each subject
- Gender of each subject
- Time each subject has spent in the new country/region
- Summary of responses
- Conclusion

#### INFORMATION RECALL TEST

INFORM	ATION RECALL TEST
Unit One	Anthropology: The Evolution of Human Endeavor
	Short-Answer Questions
	Answer each question by referring to the notes that you took while listening to the lectures in this unit.
Chapter 1	Anthropology: The Study of Human Beings and Their Creations
	1. What is the literal meaning of the word <i>anthropology?</i>
	2. Who takes credit for the development of the study of anthropology?
	3. Who were concerned with thoughts of the ideal society rather than describing their own?
	4. What is the period of travel and discovery called?
	5. What is another term for man or human being that was used in the lecture?
	6. What are the two broad fields of anthropology?

7. Who is the anthropologist that studied the people of Samoa?

	8. What is the field called that studies cultures through material sources?
	9. Give the name and location 'of an archeological study site mentioned in the lecture.
	10. What does an ethnography describe?
	11. What does social anthropology deal with?
	12. What are some areas of employment for an applied anthropologist?
Chapter 2	The Concept of Culture: Understanding One Another
Chapter 2	The Concept of Culture: Understanding One Another  1. Give Tyler's definition of culture.
Chapter 2	
Chapter 2	1. Give Tyler's definition of culture.
Chapter 2	<ol> <li>Give Tyler's definition of culture.</li> <li>What are the three stages of cultural growth?</li> </ol>

	5. Why must <b>culture</b> and society <b>coexist?</b>
	6. What is necessary for a society to share a single <b>culture?</b>
	7. What is another term for <i>multicultural!</i>
	8. Where do you find groups of <b>subcultures?</b>
	9. List three universals common to all cultures.
	10. According to Edward Sapir, why is the individual important. Do you agree!
Part Two: Essay Que	estions
	Answer each essay question below in a paragraph. Use the notes that you took on the <b>lectures</b> to provide support for the claims you make in your essay.
	1. When and where was the field of anthropology developed!
	2. Explain physical anthropology. What is the goal of this field and how do physical anthropologists study it?
	3. Explain <b>cultural</b> anthropology. What is the goal of this field and how do <b>cultural</b> anthropologists study <b>it?</b>

	4. Which subfield of anthropology would you most like to work <b>in?</b> Why? What would you like to learn? .
	5. Explain how anthropology can help us plan for the future and solve human problems.
	6. Explain the different ways that culture is defined in the lecture.
	7. Is knowing the words of another language enough for meaningful communication? What else is needed?
	8. Which of Seelye's six skills for intercultural communication do you think is the most important?
	9. Give an example of a multicultural society. Why is it considered multicultural?
]	10. <b>Think</b> about the three universals common to all cultures. Choose one universal and explain why you think it is true for all cultures.
Part Three: Construc	ting Test Questions
t	Use the notes that you took on the lectures in Unit One to write three test questions about each lecture. After you write the questions, ask a classmate to use his or her notes to answer the questions.
-	



# History: The Passing of lime and Civilizations

Chapter 3

The Egyptian Pyramids:

Houses of Eternity 24

Chapter 4

The First Emperor of China:

Building an Empire and a House of Eternity 32

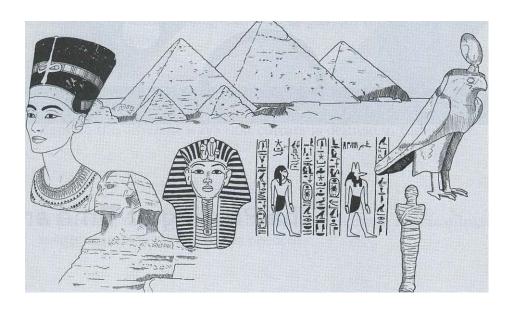
THINK ABOUT AND DISCUSS THE MEANING OF THE FOLLOWING QUOTATION:

Those who cannot remember the past are condemned to repeat it.
-George Santayana (1863-1952)

American philosopher and poet



# The Egyptian Pyramids: Houses of Eternity



# THINK ABOUT AND DISCUSS THE MEANINGS OF THE FOLLOWING QUOTATIONS:

The average person does not know what to do with this life, yet wants another one which will last forever.

-Anatole France (1844-1924)

French writer

I don't want to achieve immortality through my work. ... I want to achieve it through not dying.

-Woody **Allen** (1935-1

American filmmaker

#### I. PRELISTENING

#### A. Preview of the Content

The pyramids of ancient Egypt have fascinated and puzzled humanity for centuries. Just how were they built at a time when human beings lacked knowledge of advanced mathematics, when we had no modern machinery or technology, when we had only copper tools to work with? Certain other questions come to mind when trying to understand the incredible mystery of these fantastic monuments: questions such as why would someone-let's say a king-require that 100,000 workers labor for twenty years to construct a tomb to place his dead body in? Was it his attempt to secure immortal life for his soul when his body had stopped functioning? Was it his attempt to hide his possessions from robbers? Was it his fear of being forgotten-of being human rather than superhuman? Or was it his attempt to be equal to an immortal god? To all of these questions, the answer appears to be "yes, indeed."

In the presentation, the lecturer will trace the evolution and the development of the pyramids, and will attempt to show the human and religious significance of these gigantic monuments to mankind's search of immortality.

#### B. Think about This

What's the most interesting structure in the world? The Eiffel Tower? The Great Wall of China? A structure in your country? List three reasons why you find this structure interesting and share these reasons with a partner.

# **A**. Orientation Listening

As you listento the lecture for the first time, use the outline below to help you understand the general content of the lecture and the topics discussed. The outline should help you perceive the overall structure of the lecture and the main ideas presented by the lecturer.

- I. The pyramids of Egypt have survived time and weather.
- II. The pyramids were constructed as burial places for the ancient Egyptian royal family members.
  - A. The ancient Egyptians believed in life after death.
    - 1. They prepared for their afterlife by building tombs [pyramids] and collecting possessions to put into the tombs.
    - 2. They had their bodies preserved from decay by embalming.
    - 3. They believed that the dead person could take his or her earthly possessions along to the next world.
  - B. The tombs were built to outsmart grave robbers, but almost all of the tombs were broken into and robbed.
- m. The structure of the pyramids evolved over the centuries.
  - A. The mastaba was constructed during the First and Second Dynasties 13100-2665 B.C.E.I.
  - B. The "step pyramid" (the "typical" pyramid) was built during the Third Dynasty (2664-2615 B.C.E.).
    - 1. Built for King Zoser by the architect Imhotep.
    - 2. Is a pile of mastabas.
    - 3. King Zoser's step pyramid was never covered with stone to give it a smooth surface.
  - C. The pyramids of Giza were built during the Fourth Dynasty (2614-2502 B.C.E.).
    - 1. Located near the town of Giza, which is outside Cairo.
    - 2. The best preserved of all the pyramids.
      - a. Khufu's [Cheeps's] pyramid is the largest.
      - b. Khafre's pyramid is smaller.
      - c. Mankaure's pyramid is the smallest.
- IV. The construction of pyramids declined after the Fourth Dynasty.
  - A. Pyramids offered little or no protection for the dead kings and nobles and for their possessions from grave robbers.
  - B. Thutmose I commanded an underground tomb be built far from the Nile River and Cairo lin the Valley of the Kings).
  - C. Most pharaohs followed Thutmose's example.

# **\( \rightarrow{\overline{A}} \)** B. Listening and Notetaking

Now that you've listened to the lecture once, listen to it again and take notes. The lecturer will present a slower-paced version of the lecture and will reiterate information so you will <b>have</b> time to take down the information in note form. You will be assisted in your notetaking by a notetaking mentor who will ask you to check that you wrote down important information.			
important information.			

## **Q** C, Listening to a Recounting of the Lecture

Listen to a student recount the lecture. The student will speak in a more informal, spontaneous style, paraphrasing and summarizing the information in the lecture. As you listen, check to be sure that your notes are complete.

#### III. POSTLISTENING

#### A. Recapping the Lecture from Your Notes: Presenting the Information Orally

Recount the information you heard in the lecture to a partner, the class, or your teacher. Use your notes to help you relate the main ideas as well as the supporting information that you heard in the lecture.

#### B. Discussing Information and Issues Presented in the Lecture

In a group of two to four students, discuss the questions below. Your teacher may ask you to address one of the questions or all of them. During your discussion, use the information in your notes to support your ideas. At the end of the discussion, a representative from the group should summarize the group's discussion for the class.

- **1.** Explain why King Thutmose I decided not to be buried in a pyramid. Why had the pharaohs before him built the pyramids? What other ways do you think the Egyptian pharaohs could have solved the problems they encountered with their system of burial?
- 2. The construction of pyramids was an example of the search for everlasting life. In what other ways have people searched for immortality? Why do you think people continue to search for immortality?
- 3. The lecturer comments that the pyramids are very puzzling monuments and that many questions and mysteries surround the Egyptian pyramids. As a group, make a list of the questions and mysteries that the lecturer mentioned; then add questions that your group has about the pyramids that were not answered in the lecture.

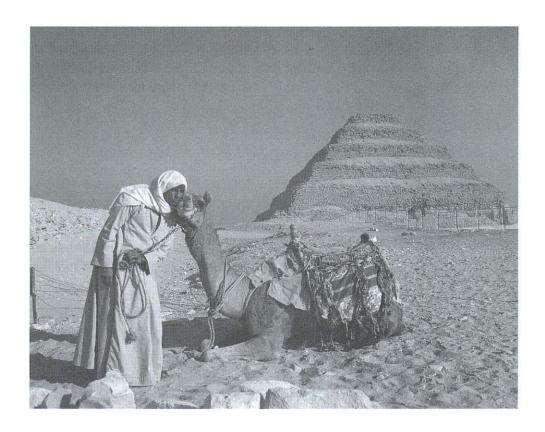
#### IV. READING EXPANSION

#### A. Reading a Magazine Article

The next passage is an excerpt from an article that appeared in *National Geographic* magazine. Before you read the passage, answer the following questions:

1. The following passage is about the Egyptian pharaoh Rarnses II. Using the information about pharaohs from the lecture, write three statements you expect to be true about Ramses II. Then share your ideas with your classmates.

- **2.** If you were going to write an article about the Egyptian pharaoh Ramses II, what would you want to find **out?** If you were writing an article for the general public, what information do you think would interest **people?**
- 3. In this unit's lecture, the speaker mentioned that the pharaohs were mummified. What do you remember about this technique for preserving bodies? If you could learn three more things about mummification, what would you want to find **out?** Share your ideas with a partner.



#### Ramses the Great

by Rick Gore

NATIONAL GEOGRAPHIC MAGAZINE, APRIL 1991

n my last day in Egypt I finally receive permission from the Egyptian Antiquities Organization to see Ramses' mummy. My colleague, Lou Mazzatenta, is also permitted to photograph the pharaoh. At the Egyptian Museum in Cairo, conservation director Nasry Iskander lifts the dark velvet off the **mummy** case. I behold the face. Browned and chisel sharp. Arms crossed regally across the chest A long neck, a proud aquiline nose,

and wisps of reddish hair, probably colored by his embalmers.

. Ramses' mummification and burial rites likely took the traditional 70 days. Embalmers removed internal organs, placing the liver, lungs. stomach, and intestines in sacred jars. His heart was sealed in his body. Egyptians believed that it was the source **of** intellect as well as feeling and would be required for the final judgment. Only **if** a heart wasas light as the

feather of truth would the god Osiris receive its owner into the afterlife.

Egyptians did not appreciate the brain. The embalmers drew it out through the nose and threw it away.

After they dried the corpse with natron salt, the embalmers washed the body and coated it with preserving resins. Finally they wrapped it in hundreds of yards of linen.

Within 150 years of Ramses' burial, his tomb was robbed by thieves and his mummy desecrated. Twice reburied by priests, the body retained some of its secrets. X-ray examination of the body indicated that Ramses suffered badly from arthritis in the hip, which would have forced him to stoop. His teeth were severely worn, and he had dental abscesses and gum disease.

The photography finished, the velvet is replaced over Ramses' mummy-but the face stays with me. Not the face of Shelley's Ozymandias, not that of a god, but the face of a man. Was Ramses bombastic, cruel, ego driven? By our standards, certainly. He left no evidence of the human complexity or the bitterly learned insights that redeem such proudful mythic kings as Oedipus, or Shakespeare's King Lear, but he did love deeply and lose. And all those children who died before him-Ramses knew human suffering. Did he really believe he was a god? Who can say? But clearly, he strove to be the king his country expected-providing wealth and security-and succeeded. More than most, this man got what he wanted.

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#### B. Discussing Information and Issues Presented in the Reading

- 1. What surprised or interested you most about the mummification process described in the passage? **Why?** Tell a classmate.
- 2. How might someone in the future interpret today's burial customs? What do our burial customs say about our beliefs about the afterlife and immortality?
- 3. The article states that the Egyptians believed that the heart was the "source of intellect as well as feeling." Modem medicine credits the brain with being the source of intellect and Western tradition considers the heart to be the center of emotions and feelings. In English there are many proverbs that reinforce this understanding, such as: "Use your head" to mean think about something critically, and "His heart isn't in it," which is said about someone who does not really care emotionally about the task he must do. Where does your culture consider to be the center of human intellect? Where does your culture place the center of feeling and emotion? Is this modern understanding the same as it was many years before? Relate any proverbs from your language that reinforce this understanding of the origin of intellect and emotion.
- 4. The author states that Ramses IT "strove to be the king his country expected-providing wealth and security-and succeeded." What do you expect from a leader of a country? Are your expectations similar to or different from the expectations listed by the author of the article? What qualities do you think are ideal in the leader of a country? Explain why.

#### **Journal Writing**

Respond to one of the following questions in your journal.

- 1. The construction of pyramids was an example of the search for life everlasting. Why and in what other ways have people searched for immortality?
- 2. Do you believe in an afterlife? Explain why or why **not?** Describe the factors (education, religion, family, schooling, and so on) that contributed to your belief.

#### **Research Project**

Individually or in a group, research one of the following topics. Write a short paper on the topic, or plan and present a group presentation to inform the class about the topic.

- a. The discovery of the tomb of the boy pharaoh, King Tutan-khamen.
- b. Compare and contrast the mastaba pyramids with the step pyramids.
- c. The pyramid of Cheeps.
- d. The workers who built the pyramids.
- e. The pyramids of Mayan and Aztec culture in South America.
- f. The life of Ramses IT or another ancient Egyptian **king** or queen.
- g. Another question that interests you or your group.



# The First Emperor of China: Building an Empire and a House of Eternity



# THINK ABOUT AND DISCUSS THE MEANINGS OF THE FOLLOWING QUOTATIONS:

We live in a culture here in [Los Angeles] that believes, with enough trips to the gym and plastic surgery, death is something that can be denied or cheated.

-Lisa Takeuchi Cullen

Time magazine, July 2003

History is **the** version of past **events** that **people** have **decided** to agree upon.

- Napoleon

French emperor (1769-1821)

Pale death with impartial tread **beats** at **the** poor man's cottage door and at **the** palace of **kings**.

-Horace

Roman poet (65-8 B.C.E.)

#### I. PRELISTENING

#### A. Preview of the Content

One of the greatest archaeological discoveries of the late twentieth century occurred in March 1974 in China. In that year, Chinese farmers digging for water unearthed a fragment of a warrior figure, part of the terracotta army of the First Emperor of China. His name was Qin Shihuang, and he ruled between 246 and 210 B.C.E. Just 15 kilometers to the west of the site where the first figure was uncovered lies the mausoleum or burial mound of the First Emperor. At the center of the burial ground is a mound that marks the emperor's grave. To date, it has not yet been excavated, and it is likely that the tomb will *not* be excavated until newer methods of archaeological preservation have been discovered. Chinese archaeologists wonder about what additional treasures they will find when they finally open the Emperor's tomb. For now, they have unearthed the Emperor's incredible terracotta army.

Who was this First Emperor of China who assembled such a wealth of grave goods for his House of Eternity? In today's lecture, you're going to hear a lecture about the first emperor of China, Qin Shihuang, and the treasures Chinese archaeologists have found in his House of Eternity.

#### B. Think about This

Make a list of the five most famous men and women in history. Also, make a list of the five most infamous men and women in history. Order the list from the most famous to the least famous, and explain why you included each person in your list. Then compare your list with that of a classmate to see how similar or different your lists are.

## **A**. Orientation Listening

As you listen to the lecture for the first time, use the outline below to help you understand the general content of the lecture and the topics discussed. The outline should help you perceive the overall structure of the lecture and the main ideas presented by the lecturer.

- I. Introduction: History and Archaeology
  - A. History is the story of a person [e.g., Napoleon) or nation [e.g., France)
  - B. Archaeology is the study of people/customs/life
    - 1. Study ancient times
    - 2. Ruins (cities/monuments/tombs/recordsl
- II. Today's lecture: two parts
  - A. History part of talk-Qin Shihuang
    - 1. Called the First Emperor of China
    - 2. He lived from 259 B.C.E. to 210 B.C.E.
  - B. One of the greatest archaeological discoveries of the late twentieth century
    - 1. What has been found in Qin Shihuang's tomb so far
- **m.** Historical context for the excavation of Qin Shihuang's House of Eternity
  - A. Name was Ying Zheng
  - B. Unified empire in 221 B.C.E. by defeating six other kingdoms
    - 1. Ended power of other kingdoms
    - 2. Started centralized imperial system, which lasted more than 2,000 years
- IV. To unify and protect empire
  - A. Standardized system for writing Chinese characters
  - B. Decreed one system of weights and measures
  - C. Decreed one system of currency
  - D. Constructed Great Wall of China
    - 1. Small walls across northwest frontier joined 1,500 miles
  - E. Road-building project
    - 1. Three major highways-6,800 kilometers (4,225 miles)
    - 2. 150 C.E. Roman Empire road system-5,984 kilometers (3,718 miles)
- V. Building of his tomb (mausoleum) or House of Eternity
  - A. 700,000 laborers worked eleven years
  - B. Tomb covers 56.25 square kilometers
  - C. Replica of Qin capital (221-210 B.C.E.)
    - 1. Contains imperial palaces [treasures], gardens, and temples
    - 2. Mercury pumped into tomb to create flowing rivers
    - 3. Contains terracotta warriors and horses

- VI. Chinese authorities build museum on site in 1975
  - A. Museum covers 16,300 square meters, which equals more than two football fields long
  - B. Three pits
    - 1. No.1 Pit-largest (960 square meters)
      - a. Opened on China's National Day, 1979
      - b. 3,210 soldiers in front; chariots in back
    - 2. No.2 Pit
      - a. Opened to public, 1994
      - b. 1,000 warriors; 90 chariots
  - C. 7,000+ terracotta soldiersfhorsesfchariotsfweapons found so far-more to be found
- Vn. Peter Hassle (National Geographic magazine) on emperors of ancientChina
  - **A.** Believed afterlife was continuation of life on Earth, like pharaohs of ancient Egypt
  - B. Archaeologists are dusting off a window to the past

# **Q** B. Listening and Notetaking

Now that you've listened to the lecture once, listen again and take notes. The lecturer will present a slower-paced version of the lecture and will reiterate information so you will have time to take down the information in note form. You will be assisted in your notetaking by a notetaking mentor, who will ask you to check that you noted down important information.			

## $\Omega$ C'-Listening to a Recounting of the Lecture

Listen to a student recount the lecture. The student will speak in a more informal, spontaneous style, paraphrasing and summarizing the information from the lecture. As you listen, check to be sure that your notes are complete.

#### III. POSTLISTENING

#### A. Recapping the Lecture from Your Notes: Presenting the Information Orally

Recount the information you heard in the lecture to a partner, the class, or your teacher. Use your notes to help you relate the main ideas as well as the supporting information that you heard in the lecture.

#### B. Discussing Information and Issues Presented in the Lecture

In a group of two to four students, discuss the questions below. Your teacher may ask you to address one of the questions or all of them. During your discussion, use the information in your notes to support your ideas. At the end of the discussion, a representative from the group should summarize the group's discussion for the class.

- 1. Why do archaeology and history go "hand in hand"? What about archaeology and psychology? What about history and geography? What other fields might lor might not) go "hand in hand"? Explain your reasons for saying they do (or do not).
- 2. The lecturer indicates it is necessary to "set the historical" context for understanding the archaeological find of the Qin Shihuang's terracotta army? Why is knowing the historical context important for modern-day archaeologists, and tourists to the site?
- 3. Provide examples of the changes Qin Shihuang made when he became emperor? Why were these changes necessary and important to him?
- 4. Compare and contrast the road-building programs of the Chinese and Roman empires in terms of date and extent of the roads constructed. What point was the lecturer making with these comparisons?
- 5. Describe the dimensions and contents of the museum erected on the site of Qin Shihuang's mausoleum, to date.
- 6. Discuss the ways in which the pharaohs of ancient Egypt and the emperors of ancient China were similar and different in terms of their views of life and death, and their preparation for the afterlife.

#### A. Reading an Excerpt from a Book

The following excerpt is from the book *The Emperor's Silent Army: Terracotta Warriors* of *Ancient China* by Jane O'Connor. The excerpt reiterates some of the information you already know about: (1) Qin Shihuang's rule of the Qin Empire, (2) his desire to achieve immortality, and (3) the tomb he had built with its army of terracotta warriors to guard his tomb. There are, however, additional pieces of information you did not already know about the First Emperor in the reading.

Scan the article quickly to locate the pieces of information listed below. Underline the information in the reading, and then return to the information list to choose another piece of information you need to look for in the reading passage to underline.

#### Scanning for Information: The Quest for Immortality

- 1. The ruler of the Qin kingdom had neaten up his neighbors like a silkworm devouring a leaf."
- 2. The name China comes from Qin.
- 3. To the people of the time, this was the entire civilized world.
- 4. To the ruler of Qin, being called king was no longer grand enough.
- 5. More than anything, the emperor wanted to live forever.
- 6. Over the years, the emperor sent expeditions out to sea in search of the islands and the magic potion.
- 7. He ate powdered jade and drank mercury in the belief that they would prolong his life.
- 8. The tomb of Qin Shihuang had been under construction for more than thirty years.
- 9. According to legend, [the tomb] had a domed ceiling inlaid with clusters or pearls to represent the sun, moon, and stars.
- 10. So he had machines put inside the tomb that produced the rumble of thunder to scare off intruders, and mechanical crossbows at the entrance were set to fire arrow automatically should anyone dare trespass.
- 11. As the men worked their way back through the tunnels to the tomb's entrance, a stone door came crashing down, and they were left to die, sealed inside the tomb along with the body of the emperor.

#### Scanning for Information: Buried Soldiers

- 1. His army was said to be a million strong.
- 2. The entire army faces east.
- 3. So Qin Shihuang feared that any enemy uprising would come from that direction.
- 4. About one thousand have already been excavated and restored.
- 5. The long rectangular arrangement of soldiers in Pit 1 follows a real battle formation used to defeat real enemies in ancient times.

- 6. With an estimated 900 warriors of all different ranks, Pit 2 serves as a powerful back-up force to help the larger army in Pit 1.
- 7. Archaeologists think that Pit 3 represents army headquarters.
- 8. In earlier time in ancient China, real soldiers and horses were killed and buried alongside their dead ruler.
- 9. Once the figures were buried underground, it was believed that they would come to life magically and protect the dead emperor both from real attackers hoping to ransack his tomb and from evil spirits wanting to harm his immortal soul.
- 10. Was the creation of the clay soldiers simply not worthy of mention! Or was the emperor making sure that nobody knew about his ultimate secret weapon!

## The Quest for Immortality

BEFORE the time of Qin Shihuang (pronounced chin shir-hwong), who lived from 259 to 210 B.C.E., there was no China. Instead, there were seven separate kingdoms, each with its own language, currency, and ruler. For hundreds of years they had been fighting one another. The kingdom of Qin was the fiercest; soldiers received their pay only after they had presented their generals with the cut-off heads of enemy warriors. By 221 B.C.E. the ruler of the Qin kingdom had "eaten up" his neighbors like a "silkworm devouring a leaf," according to an ancient historian. The name China comes from Qin.

The king of Qin now ruled over an immense empire--around I million square miles that stretched north and west to the Gobi desert, south to present-day Vietnam, and east to the Yellow Sea. To the people of the time, this was the entire civilized world. Not for another hundred years would the Chinese know that **empires** existed beyond their boundaries. To the ruler of Qin, being called king was no longer grand enough. He wanted a title that no one else had ever had before. What he chose was Qin Shihuang. This means "first emperor, God in Heaven, and Almighty of the Universe" all rolled into one.

But no title, however superhuman it sounded, could protect him from what he feared **most—dying**. More than anything, the emperor wanted to live forever. According to legend, a magic elixir had granted eternal life to the people of the mythical Eastern Islands. Over the years, the emperor sent expeditions out to sea in search of the islands and the magic potion. But each time they came back empty-handed.

If he couldn't live forever, then Qin Shihuang was determined to live as long as possible. He ate powdered jade and drank mercury in the belief that they would prolong his life. In fact, these "medicines" were poison and may have caused the emperor to fall sick and die while on tour of the easternmost outposts of his empire. He was forty-nine years old.

The tomb of Qin Shihuang had been under construction for more than thirry years. It was begun when he was a young boy of thirteen and was still not finished when he died. Even incomplete, the emperor's tomb was enormous, larger than his largest palace. According to legend, it had a domed ceiling inlaid with clusters of pearls to represent the sun, moon, and stars. Below was a gigantic relief map of his world, made from bronze.

Bronze hills and mountains rose up from the floor, with rivers of mercury flowing into a mercury sea. Along the banks of the rivers were models of the emperor's palaces and cities, all exact replicas of the real ones.

In ancient times, the Chinese believed that life after death was not so very different from life on earth. The soul of a dead person could continue to enjoy all the pleasures of everyday life. So people who were rich enough constructed elaborate underground tombs filled with silk robes, jewelry with previous stones, furniture, games, boats, chariots--everything the dead person could possibly need or want.

Qin Shihuang knew that grave robbers would try their best to loot the treatures in his tomb. So he had machines put inside the tomb that produced the rumble of thunder to scare off intruders, and mechanical crossbows at the entrance were set to fire arrows automatically should anyone dare trespass. The emperor also made certain that the workers who carried his coffin in to its final resting place never revealed its exact whereabouts. As the men worked their way back through the tunnels to the tomb's **en**trance, a stone door came crashing down, and they were left to die, sealed inside the tomb along with the body of the emperor.

Even all these measures, however, were not enough to satisfy the emperor. And so, less than a mile from the tomb, in underground trenches, the terracotta warriors were stationed. Just as flesh-and-blood troops had protected him during his lifetime, the terracotta troops were there to protect their ruler against any enemy for all eternity.

#### **Burled Soldiers**

Qin Shihuang became emperor because of his stunning victories on the battlefield. His army was said to be a million strong. In every respect except for number, the terracotta army is a faithful replica of the real one.

So far terracotta troops have been found in three separate pits, all close to one another. A fourth pit was discovered, but it was empty. The entire army faces east. The Qin kingdom, the emperor's homeland, was in the northwest. The other kingdoms that had been conquered and had become part of his empire lay to the east. So Qin Shihuang feared that any enemy uprising would come from that direction.

The first pit is by far the biggest, more than two football fields long, with approximately six thousand soldiers and horses. About one thousand have already been excavated and restored. None of the soldiers in the army wears a helrnet or carries a shield, proof of the Qin soldiers' fearlessness. But the archers stationed in the front lines don't wear any armor either. They needed to be able to move freely in order to fire their arrows with accuracy. And so these frontline sharpshooters, who were the first targets of an approaching enemy, also had the least protection.

Stationed at various points among the foot soldiers are about fifty charioteers who drove wooden chariots. Each charioteer had a team of four horses and is dressed in full-length armor. In some carts, a general rides beside the charioteer, ready to beat a drum to signal a charge or ring a bell to call for a retreat.

The long rectangular arrangement of soldiers in Pit 1 follows a real battle formation used to defeat real enemies in ancient times. It is a called a sword formation, with the frontline archers representing the tip of the sword, the chariots and columns of foot soldiers forming the blade, and the rear guard the handle.

Pit 2 is smaller than Pit 1. With an estimated 900 warriors of all different ranks, Pit 2 serves as a powerful back-up force to help the larger army in Pit 1. There are also almost 500 horses-about 350 chariot horses and more than 100 cavalry horses.

Pit 3, by far the smallest, contains fewer than seventy warriors and only one team of horses. Archaeologists think that Pit 3 represents army head-quarters. That's because the soldiers are not arranged in attack formation. Instead, they face one another in a U shape, as if they are busy consulting among themselves.

In earlier times in ancient China, real soldiers and horses were killed and buried alongside their dead ruler. But by'the time of Qin Shihuang, this horrible custom was no longer so common. Instead, clay or wooden figurines were substituted for human sacrifices. Once the figures were buried underground, it was believed that they would come to life magically and protect the dead emperor both from real attackers hoping to ransack his tomb and from any evil spirits wanting to harm his immortal soul.

Interestingly, there is not a single word about the buried army in any records from ancient times. Why was this? Was the creation of the clay soldiers simply not worthy of mention? Or was the emperor making sure that nobody knew about his ultimate secret weapon?

O'Connor, J. (2002). **The** Emperor's Silent Army: Tenacotta **Warriors** of Ancient China. New York: Viking (pp. 12-27).

#### B. Discussing Information and Issues Presented in the Reading

- 1. Briefly contrast the state of the seven kingdoms before and after Qin Shihuang became emperor.
- 2. Give an example of how the ancient Chinese were trained to be fierce warriors. Would such a tactic work today? Why or why not? What skills do you think warriors need to have today?
- 3. What official title was adopted by the First Emperor? Why did he choose this title? Discuss the importance of a person's "title," and provide specific examples of titles used by people to obtain respect and power.
- 4. Explain what Qin Shihuang did to try to extend his life. What was the result of his attempt? What "methods" do people use today to attempt to extend their years on earth? Which methods are effective and which are not?
- 5. Where was Qin Shihuang when he died? How old was he? Consider the death of another powerful leader of a country. When did it occur? What effect did the death of the leader have, if any?
- 6. Describe the supposed physical layout of Qin Shihuang's tomb.
- 7. List at least five methods that were used to "protect" the tomb from grave robbers?

- 8. Describe the following: (1) the physical layout of the three pits of terracotta warriors; (2) the purpose of the particular layout of the warriors in each pit; and 13) the belief that motivated the burial of the terracotta warriors.
- 9. Distinguish the practice of burying warriors and horses before land when] Qin Shihuang came to power.
- 10. Why does the author believe there is not a single word about the buried army in any written records from ancient China? Could there be any other reasonls] the unearthing of the tomb was a tremendous surprise?

#### **Journal Writing**

Respond to one of the following questions in your journal.

- 1. Describe a funeral you attended in terms of the following:
  - a. The burial cereniony
  - b. The attempt to keep alive the memory of the person who died
- 2. In the United States, some people bury their pets (dogs, cats, birds) in pet cemeteries where the pet is buried in a small plot of land. On the marker is the name of the pet and other information. Do you think pets should be buried in this way? Why or why not?
- 3. Lisa Takeuchi Cullen writes in *Time* magazine that some people plan to have their bodies cremated (burned), and to have their ashes put in distinctive resting places. The ashes can be melded into concrete "reef balls" by Eternal Reefs, a company in Georgia. Or they can be launched on a rocket by Houston-based Celestis to orbit the earth in a capsule. They can even have their ashes turned into diamonds by the LifeGem company of Illinois. For example, <sup>n</sup> Allen Lucas . . . asked LifeGem to turn his share of his mother's remains into .33-carat stones because 'my mother was as hard and brilliant as a diamond.' His two teenage daughters will wear Grandma as jewelry."! What do you think of these death-defying ideas? Explain why you feel as you do.

<sup>1</sup> Cullen, L. T. IJuly 7, 20031. What a way to go. *Time*, Vol. 162, No. I.

#### **Research Project**

Individually or in a group, research one of the following topics and write a short paper on the topic, or plan and present a group presentation to inform the class about the topic.

- a. The initial discovery of the tomb of the First Emperor
- b. Compare and contrast the ancient Egyptian and Chinese view of life after death and preparation for the afterlife
- c. The archaeological process of unearthing the tombs and artifacts
- d. Another great archaeological discovery
- e. Another related topic that interests you or your group

INFORMATION RECALL TEST			
Unit Two	History: The Passing of Time and Civilizations		
<b>Part</b> One: S	Short-Answer Questions  Answer each question by referring to the notes that you took while listening to the lectures in this unit.		
Chapter 3	The Egyptian Pyramids: Houses of Eternity		
	1. For how many years did the ancient Egyptian empire last?		
	2. How many consecutive dynasties ruled ancient Egypt?		
	. 3. What was the main function of the pyramids?		
	4. Give examples of three kinds of "grave goods" that the Egyptians provided for a dead person to take to the next world.		
	5. Identify the term, and describe the first type of pyramid constructed.		
	6. Where are the three Great Pyramids located?		

7. What did the ancient Greeks call King Khufu?

	8.	blocks that were used to build Khufu's pyramid.
	9.	Estimate the height of each of the Great Pyramids.
	10.	Describe the way Thutmose I changed the way Egyptian pharaoh built their tombs.
Chapter 4	The First Emp	peror of China: Building an Empire and a House of Eternity
	1.	During what years did Qin Shihuang live?
	2.	What was Qin Shihuang's name before he became emperor?
	3.	In what year did Ying Zheng unify the empire in China?
	4.	What did Ying Zheng's defeat of the six regional kingdom achieve?
	5.	When he became Emperor, what administrative changes did he make?

6. Explain the measures Qin Shihuang took to unify his empire in terms of the writing and currency systems.
7. Peter Hassle of <i>National Geographic</i> magazine said the emperors of ancient China saw the afterlife as a continuation of life or Earth, much as the ancient Egyptians saw the afterlife as a continuation of life on Earth. Illustrate what Hassle meant by giving at least three specific examples to support his contention.
8. How many laborers do historians believe were involved in building the First Emperor's House of Eternity?
9. Give the dimensions of the highways built in Qin Shihuang's reign. Compare them to the Roman Empire's road system.
10. How long did construction of the emperor's tomb take?
11. Why do archaeologists believe mercury may have been used to create the image of flowing rivers in the tomb?
12. What is the significance of the following years for the First Emperor's tomb? a. 1975 b.1976 c. 1979 d. 1994

13. Speculate about what might be found in the tomb in the future. Explain why you made this speculation.

#### Part Two: Essay Questions

Answer each essay question below in a paragraph. Use the notes that you took on the lectures to provide support for the claims you make in your essay.

- 1. Describe the chronological development of the pyramids in ancient Egypt. Begin with the earliest form of the pyramid and explain how the architecture of the pyramids developed. Give examples where appropriate,
- 2. Discuss the role religion and belief systems played in history, using examples from the lecture on the Egyptian pyramids and the First Emperor of China.
- 3. Select one of the pyramids discussed in the lecture. Using information recorded in your notes, write a description of the pyramid.
- 4. Discuss the problems the pharaohs encountered in using pyramids to mark their burial sites. Describe the steps King Thutmose I took to resolve these problems and then describe other solutions that the pharaohs could have employed.
- 5. Agree or disagree with the statement: "The fields of history and archaeology go hand in hand."

- 6. Describe the following:
  - a. the unification of China
  - b. the changes brought about by Qin Shihuang
  - c. the tomb-construction project
  - d. the most striking feature of Qin Shihuang's tomb
  - e. the contents of Pits 1 through 3
- 7. Explain the meaning of the saying that "archaeologists are dusting off the window to the past."
- 8. Choose one of the pyramids discussed in the lecture. Using information recorded in your notes, write a description of this pyramid.
- 9. Name some of the problems the pharaohs encountered in using pyramids to mark their burial sites. What steps did King Thutmose I take to resolve these problems? What other solutions could he have employed?
- 10. Explain what is holding up full excavation of the Emperor's tomb? And when do archaeologists suspect the tomb may be fully excavated? In the near or distant future? Why?

#### Part Three: Constructing Test Questions

Use the notes that you took on the lectures in Unit Two to write three test questions about each lecture. After you write the questions, ask a classmate to use his or her notes to answer the questions.



# Sociology: Women, Men and Changing Roles

Chapter 5

The Women's Movement:

From Liberation to Feminism 50

Chapter 6

The Men's Movement:

What Does It Mean to Be a Man? 60

# THINK ABOUT AND DISCUSS THE MEANING OF THE FOLLOWING QUOTATION:

All the world's a stage,

And all the men and women merely players.

They have their exits and their entrances,

And one man in his time plays many parts.

-William Shakespeare (1564-16161

English dramatist and poet



### The Women's Movement:

#### From Liberation to Feminism



# THINK ABOUT AND DISCUSS THE MEANINGS OF THE FOLLOWING QUOTATIONS:

The world taught women **nothing** skillful, and then said her **work** was **valueless**. It **permitted her** no **opinions**, **and** said she did not know how to **think**.

-Carrie Chapman Catt (1859-1947)

American suffragist

Of all the rights **Of**women, **the** greatest is to be a **mother**.

**-Lin** Yutang (1895-1976)

Chinese-American writer

#### A. Preview of the Content

The women's movement has become one of the most talked-about and important social movements of the twentieth century in the United States and in many other countries throughout the world. It has, for better or for worse, altered the course of American politics, education, and employment, and it has even changed the family structure. As a result, it has had a tremendous impact on the lives of millions of American men, women, and children. In this lecture we will be dealing primarily with the impact the women's movement has had on the political, economic, and social system of the United States, but this does not mean that its influence has not been felt in other countries. It certainly has been, and in all probability Will be, felt in even more countries in the future.

The lecturer starts out by explaining the history of the women's movement since its beginnings in the I800s. She covers most of the major social changes that occurred through the I900s as well and then, in some detail, she discusses the progress that has been made in the present day. The lecturer explains changes in the areas of the workplace, politics, and the home that have occurred as a result of the women's movement, and she uses examples, illustrations, and statistics to back up her claims.

At the end of the lecture, the lecturer explains that although many people still consider the women's movement to be a necessary element of American society, many people have differing opinions about the form the movement should take. The lecturer concludes by stating that the terms associated with the women's movement are not nearly as important as the changes that the movement has caused in society, particularly in the United States.

#### B Think about This

- 1. With a partner, describe two women you greatly admire and tell why you admire them. In what ways are the women similar? In what ways are they different?
- 2. Rank the following priorities in order of importance 11 = highest, 9 = lowest) for each woman: 1) motherhood and family, 2) professional career, 3) business success, 4) political ambition, 5) physical beauty, 6) intelligence, 71 wealth, 81education, 9) you name the quality.

Woman's name	Woman's	name _
I.	1.	_
2.	2.	_
3	3.	
Δ.	4.	
5	5.	_
6	6.	_
7	7.	
8.	8.	
9	9.	_

## **A**. Orientation Listening

As you listen to the lecture for the first time, use the outline below to help you understand the general content of the lecture and the topics discussed. The outline should help you perceive the overall structure of the lecture and the main ideas presented by the lecturer.

- I. The women's movement is a century and a half old
  - A. Organized movement began in mid-1800s (Ryan: Feminism and the Women's Movement)
  - B. Women then considered nonpersons and could not
    - I. inherit property
    - 2. control their own money
    - 3. gain custody of their children after divorce
    - 4. vote
- n. Changes in the 1900s-Europe and America
  - A. After World War I, many countries gave women the right to vote (1920 in the U.S.)
  - B. World War II-women entered the job market
  - C. Today women have gained more job opportunities
    - 1. Hold positions of leadership
    - 2. Entering male-dominated professions: firefighters and pilots
- ill. Women-owned businesses
  - A. Are one of fastest-growing segments of U.S. economy
    - 1. "Hot spots" for women entrepreneurs in western United States: Idaho, Wyoming, Utah, Nevada, Arizona
  - B. Employ more people domestically than the Fortune 500 worldwide
  - **C.** Challenge women to find balance between work, family, and social life
- IV. Women in politics
  - A. Number of female state legislators has grown more than 500 percent since 1969
  - B. Countries that have had women presidents and prime ministers

- V. The family
  - A. Less than 10 percent of American families have traditional working father and stay-at-home mother
  - B. Child care
    - 1. Men playing more active role
    - **2.** Business and government helping
    - 3. More government-sponsored child care and parental leave are needed
- VI. The women's movement and feminism
  - **A.** Diverse opinions about how to achieve equality for men and women
  - B. Feminism
    - 1. Difficult to define
    - **2.** Everybody should have the opportunity to be the best they can (Feminism and the Women's Movement)
- Vn. The contributions to society by the women's movement and feminism
  - **A.** Society is benefiting from these women's contributions
  - B. Women have more freedoms, opportunities, and headaches

# R. Listening and Notetaking

Now that you've listened to the lecture once, listen again and take notes on the information contained in the lecture. <b>The</b> lecturer Will present a slower-paced version of the lecture and Will reiterate information so you Will have time to take down the information in note form. You Will be assisted in your notetaking by a notetaking mentor who will ask you to check that you wrote down important information.

## C. Listening to a Recounting of the Lecture

Listen to a student recount the lecture. The student will speak in a more informal, spontaneous style, paraphrasing and summarizing the information from the lecture. **As** you listen, check to be sure that your notes are complete.

#### **III. POSTLISTENING**

#### A. Recapping the Lecture from Your Notes: Presenting the Information Orally

Recount the information you heard in the lecture to a partner, the class, or your teacher. Use your notes to help you relate the main ideas as well as the supporting information that you heard in the lecture.



#### B. Discussing Information and Issues Presented in the Lecture

In a group of two to four students, discuss the questions below. Your teacher may ask you to address one of the questions or all of them. During your discussion, use the information in your notes to support your ideas. At the end of the discussion, a representative from the group should summarize the group's discussion for the class.

- 1. Discuss the roles women play in your country in
  - a. the home
  - b. the economy and the job market
  - e. politics
  - d. religion
  - e. education
  - f. other areas
- 2. Should women who have children (ages newborn to teenagers] work outside the home? Provide at least five reasons why they should or should not.
- 3. Are there fields of employment that are particularly suitable for women? What are they? Are there certain fields that are particularly unsuitable for women? What are they? If you have listed any occupations as suitable or unsuitable for women, explain what aspects of these occupations you feel make the jobs suitable or unsuitable for women.

#### IV. READING EXPANSION

#### A. Reading a Newspaper Article

The lecture introduced you to some of the roles that women play in North American society and explained how these roles are changing. The information in the lecture, however, is rather specific to the United States. The article that you are about to read focuses on the women's movement in another country-s-lapan. Before you read the article, answer the questions below.

- 1. Read the title of the article. What does the title tell you about the women's movement in Japan? What do you think it means to be a "reluctant feminist"? **Share** ideas with your classmates.
- 2. According to the title of the article, the women's movement in Japan is not moving very fast. Why might this be so? With a partner, list three possible reasons. Then compare ideas with your classmates.
- 3. If you were going to write a newspaper article about the women's movement in Japan, what would you want to find out? Work with your classmates to write a list of questions. Then look for answers to your questions as you read the article.

## Reluctant Feminists

### Women's Movement in Corporate Japan Isn't Moving Very Fast

Government Pushes Hiring, But Female Professionals, Firms Stay Committed

Dorms, Curfews and Uniforms

 $\label{eq:YumikoOno} YumikoOno\\ Staff Reporter\\ THE WALL STREET JOURNAL$ 

Tokyo-Yuka Hashimoto was hired from college two years ago by Fuji Bank Ltd. and was assured she could rise as high in management as her talents allowed. She was assigned to the bond trading desk.

Now clad in a bright pink suit, she sometimes finds herself serving tea to office gnests. Her male colleagnes never do.

Though she privately complains that the task can interfere with her work, the 24-year-old Ms. Hashimoto gasps at any suggestion that she refuse the chore as sexist. "I'm not saying I won't serve tea because I'm a career-track employee," she says.

Like Ms. Hashimoto, many Japanese women are reluctant feminists. They generally accept the six biased slights common in Japanese companies. And when asked to choose between career and marriage, professional women more often choose to stay home. The women's movement here is moving nowhere fast.

"In America, women started a movement because they looked at the situation as a problem," says Eiko Shinotsuka, associate professor of home economics at Ochanomizu University, who follows women's labor issues. But in Japan, she says, "many women aren't particularly dissatisfied with the situation they're in."

#### Poll Results

In a recent survey by Phillip Morris KK., the Japanese subsidiary of U.S.-based Phillip Morris Cos., 55% of 3,000 Japanese women polled said they weren't being treated equally with men at work, and less than a third of them said they expected women's lives to improve over the next two decades. Yet, only 26% of the women said they felt a need for a strong and organized women's movement. In a similar survey of American women, a much smaller 29% believed they were treated unfairly at work, most were optimistic

about the future for women, and 37% said a women's movement was needed.

Japanese companies dramatically increased their hiring of college-educated women in professional jobs after Japan's Diet, or parliament, passed a law barring sex discrimination in the workplace in 1986. The government's aims were to alleviate a growing labor shortage and bolster Japan's image abroadnot to meet demands from Japanese women.

Unlike in the U.S., where women have aggressively fought for equality, women here have hardly raised a whimper. Much to the government's dismay, many professional women are indifferent toward a long-term career.

#### Early Bow-Outs

Women make up 40% of Japan's work force, including part-timers, but only 1% of them hold managerial positions. And labor specialists estimate that between 25% and 60% of the women who began corporate careers here four years ago have already quit their jobs. According to a 1989 survey by Labor Administration Inc., a government-affiliated research concern, the attrition rate for professional men was just 11% four years after the start of their careers. The same survey found the attrition rate for all female college graduates at Japanese companies, including those traditional clerical jobs, was 45%.

"I intended to stop working when I had my child," says 28-year-old Sayuki Kanda, who left her Tokyobased textile company last year after working as a public relations officer for five years. Although she enjoyed her responsibility, Ms. Kanda says she can't be persuaded to return to the corporate ladder. "In the end, large companies are a male-oriented society. It's not a place for women to work for life." After having three children, Ms. Kanda plans to do some part-time work.

But many companies realize that with the increasing labor shortage, somehow they'll have to think of a way to attract more women and encourage them to stay. Sumitomo Bank is hiring 250 women out of college this spring, out of 864 new hires, on a "new career track." Asahi breweries recently hired **no** women out of its 900 new marketers, and has started

sending them to sell Asahiproducts to liquor storeslong considered a man's domain.

#### **Greener Pastures**

Not all of the women who abandon corporate careers return to hearth and home. Some join small companies or foreign firms that have an image of being more evenhanded. Others enroll in U.S. graduate schools or start their own business.

Those who stay confront a business world still sharply divided by sex. The middle-aged men who run Japanese companies expect professional women to tackle work just like men, in an unflagging manner, described as "bari-bari"-literaI1y, "a crunching sound." And yet they routinely insist on rules for women that they wouldn't dream of imposing on men. (The 1986 law barring sex discrimination established no penalties for violations.) Some require career women in their mid-20s to wear company uniforms, live in company dormitories, and observe a 10 p.m, curfew and get their parent's consent before taking assignments abroad.

A few stodgy banks have a "custom" for a woman-professional or clerical-to quit **if** she marries someone within the company. The reasoning for this, the banks say, is that **if** a husband is transferred, as is common every few years, it would be too difficult to also transfer the wife.

Sumitomo Banks insists that women in professional jobs initially wear the same navy blue corporate uniform worn by its secretaries, known as

"office ladies" or "OLs." It says this makes less blatant the labeling of career and non-career women, which might upset the OLs.

No one complains. Kazumi Tarnai, who was hired for Sumitomo's corporate research department four years ago, says she accepted the uniform because she didn't want customers to ask why she was the ouly woman wearing regular clothes. "It's not something to raise your voice about," she says. After two years, professional women may wear their own clothes.

Many confess they aren't as committed as their male colleagues to the life of a careerist in a Japanese company, which typically requires late hours, after-work drinking sessions with colleagues and a pledge of allegiance to the company until retirement. By comparison, the image of a housewife, who is free to go shopping, play teunis and perhaps hold a side job or two, is more attractive to many women. "Japanese men are such workaholics," says Ochanomizu's Ms. Shinotsuka. "The women have doubts about having to work like the men."

They also seem to share Japanese society's assumptions that men and women have different roles. Most agree that when a woman marries, taking care ofher husband and children should be her priority.

For now, Ms. Tarnai is throwing herself into her career. She eats lunch with the men's group and drinks with them afterwork. She says her dream is to continue the life of a "salaryman,"

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### B. Discussing Information and Issues Presented in the Reading

- 1. Using what you know from the article on the women's movement in Japan and from the lecture on the women's movement in the United States, compare and contrast the situation of a typical married woman with professional training in Japan with the situation of a typical married woman with professional training in the United States. What aspects of the American system might seem undesirable to a Japanese woman? How might an American woman feel about having to work within the Japanese system?
- 2. Describe the situation of professional women in your own country. Consider these aspects of the roles professional women play: (11 the number of women who work outside the home; (2) the types of occupations that are commonly open to women; (3) the amount of housework men are willing to help with; (4) the amount of

money women receive when compared to the amount men receive for performing the same job.

- 3. Is there a women's movement in your **country?** Is such a movement **needed?** Explain why or why not. If there is a movement, describe the current women's movement in your country, and if you think a woman's movement is necessary, describe the type of movement that you think would be ideal.
- **4.** The article states that many people in Japanese society agree, "that men and women have different roles. Most agree that when a woman marries, taking care of her husband and children should be her priority." Do you personally agree or disagree with this statement? Be sure to give reasons. and examples to support your opinion.

#### **Journal Writing**

Respond to the following question in your journal: Should men help with the housework and the raising of children? Explain why they should or should not. Is it acceptable for a husband to take over all duties in the house if his wife has a full-time job that pays a salary sufficient to support the family? Why or why not?

#### **Research Project**

Individually or in a group, research one of the following topics and prepare an oral presentation (or a paper) on the information learned about the topic. You may wish to use the Internet, as well as books, to locate interesting information.

a. Women's health issues including	ig (but not limited to) the eating
disorders anorexia and bulimia	
<b>b.</b> Domestic violence: its cause and	d prevention
c. Salary comparison for women	and men in _
(name country/region)	
<b>d.</b> Famous women of	(name of country/region)
e. Infamous women of	(name of country/
region)	
f. Political issues of importance t	o women in _
(name of country/region]	
g. Social issues of importance to	women in
(name of country/region]	
<b>h.</b> Sexual harassment in the workp	lace and in public



# The Men's Movement: What Does It Mean to Be a Man?



# THINK ABOUT AND DISCUSS THE MEANING OF THE FOLLOWING QUOTATION:

Men are men before they are lawyers, or physicians, or merchants, or manufacturers; and if you make them capable and sensible men, they will make themselves capable and sensible lawyers or physicians.

-John Stuart Mill 11806-1873)

English philosopher and economist

#### I. PRELISTENING

#### A. Preview of the Content

In this lecture, you will learn something about the men's movement, a relatively new social movement in the United States-and one that some would call a countermovement to the women's movement. You will learn something about the societal forces that have catalyzed the movement, and the psychological reasons why the movement has gained strength among men. The lecturer will also provide a perspective on the varied nature of the movement, the types of men's groups within the movement, and the objectives of the men who work together as brothers under the umbrella of the men's movement.

#### B. Think about This

Compile a list of qualities that you think are essential for a successful male in the United States, Now compile a second list of qualities that you think are essential for a successful male in your home country. Share your lists with a partner.

### **A**. Orientation Listening

As you listen to the lecture for the first time, use the outline below to help you understand the general content of the lecture and the topics discussed. The outline should help you perceive the overall structure of the lecture and the main ideas presented by the lecturer.

- I. Reasons why the men's movement began
  - A. Women's movement caused men and women to rethink their roles
  - B. Men's movement began to help men support each other in this time of change
- II. Two views of the men's movement
  - A. The men's movement as a backlash against the women's movement (according to author Susan Faludi)
    - 1. Men's resentment toward women's professional and personal advances
    - **2.** A similar backlash in ancient Rome when women gained freedom
  - B. The men's movement as a brotherhood of psychological support for men
    - 1. Example: father's rights in divorce cases
    - 2. Confusing images of men in contemporary media
- m. Origins of the crisis in masculinity
  - A. Changes caused by the Industrial Revolution (according to poet Robert Bly)
    - 1. Kind of work men did changed
    - **2.** Men no longer saw the product of their labor
    - 3. Men worked away from home and spent less time with their sons
    - 4. Young men lacked role models
  - B. Effect of the women's movement on the men's movement
    - 1. Men play more active roles in child care and housework
    - 2. Men are entering occupations traditionally held by women
    - 3. Men have female colleagues whose communication and management styles often differ from men's
- IV. Forms the movement takes
  - A. Male feminists
  - B. Men's support groups
  - C. Male activists
  - D. Mytho-poetic
- V. What do women think of the men's movement?
  - A. Many feminists do not like the men's movement
  - B. Wives of men who participate are often pleased

- VI. Difficult to define the movement simply
  - A. Movement is like a tree with many branches and many roots
  - B. Substantial impact on North American men and women

## **B.** Listening and Notetaking

notes. The lecturer will present a slower-paced version of the lecture and will reiterate information so you will have time to take down the information in note form. You will be assisted in your notetaking by a notetaking mentor who will ask you to check that you wrote down important information.

### $oldsymbol{\Omega}$ C. Listening to a Recounting of the Lecture

Listen to a student recount the lecture. The student will speak in a more informal, spontaneous style, paraphrasing and summarizing the information from the lecture. As you listen, check to be sure that your notes are complete.

#### III. POSTLISTENING

#### A. Recapping the Lecture from Your Notes: Presenting the Information Orally

Recount the information you heard in the lecture to a partner, the class, or your teacher. Use your notes to help you relate the main ideas as well as the supporting information that you heard in the lecture.

#### B. Discussing Information and Issues Presented in the Lecture

In a group of two to four students, discuss the questions below. Your teacher may ask you to address one of the questions or all of them. During your discussion, use the information in your notes to support your ideas. At the end of the discussion, a representative from the group should summarize the group's discussion for the class.

- 1. Compare and contrast the men's movement and the women's movement in the United States. Consider such areas of the movements as:
  - a. goals
  - b. activities
  - c. effects on society
  - d. history
  - c. any other areas your group can develop
- 2. What reasons does **the** lecturer give for the growth of the men's movement? List as many reasons as you can, adding any reasons that your group thinks of. List the four groups of the men's movement, and decide **if** these four different groups have different causes or **if** all four groups have the same causes.
- 3. How are men's and women's roles different in your culture? Are there certain tasks that men or women do not usually perform? If so, what are these tasks? How do men's and women's roles in your culture differ from the roles men and women play in the United States?



#### IV. READING EXPANSION

#### A. Reading 1: Reading a Newspaper Article

On Father's Day, a U.S. holiday to honor fathers, this newspaper article appeared in the State College, Pennsylvania, newspaper, *The Centre Daily Times*. Before you read the article, answer the questions below.

- 1. Think of a man you admire. Why do you admire this person? List three reasons. Read your list to the class and then ask your classmates if they would admire a woman for the same reasons.
- 2. The dictionary defines the word *masculine* as "having the qualities suitable for a man." In your opinion, what are these qualities? List your ideas and **then** compare notes with a classmate.
- 3. Read the title of the newspaper article on page 66. Based on the title, what do you expect the writer to say about the "crisis of masculinity"? Share your ideas with a classmate.
- 4. This article takes a look at the changing definition of manhood in the United States. Three events that contributed to this change are listed in the chart below. As you read the article, look for the effects of these events and add them to the chart below.

Historical events	Effects on the definition of manhood
industrialization	
World War I	
influx of immigrants	

## A Crisis of masculinity? Don't worry, it's nothing new

By Caryl Rivers

Happy Father's Day, Men of America.

Are you the Sensitive Male, the Post-Sensitive Male, the Involved Dad, the Macho Man, the Neowimp or the Terminator?

Confused about the crisis of masculinity in contemporary society? Do you fail to recognize yourself in all the images of manhood bandied about, from the shirtless sex symbol in the Diet Coke ad to the angst-ridden family men in re-runs of "Thirtysomething" to the cheerless killing machines of the action-adventure flicks?

Do you long for the good old days, when men were men and guys didn't have to worry about who-c-or what-they were?

It may be some consolation to know this confusion is nothing new. The crisis of masculinity is not a novel historical phenomenon, created by the women's movement or economic downsizing or modern urban life.

In fact, the crisis of masculinity is as American as apple pie. Teddy Roosevelt worried about it. So did Henry James.

One can imagine Natty Bumpo, sitting on a log in his deerskins, wondering whether the Iroquois had the manhood thing right, and if he had to scurry to catch up.

Every historical era, in fact, seems to have been conflicted over the correct definition of manhoodand whatever it was, people were sure men didn't have enough of it.

In the late 19th century, it was the closing **of** the frontier that was bemoaned as signaling the end of manhood. Historian Frederick Jackson Turner noted that the "dominant fact of American life has been **expansion.**"

People worried that the end of the frontier would mean the end of the idea of the unfettered American man, able to push west, to cut down trees, to move elsewhere if things didn't work out where he wasto pull up stakes and move again.

Industrialization and the great migration from farm to city were also altering men's relations to their work. Before the Civil War, Rutgers sociologist Michael Kimmel points out, 88 percent of American males were small farmers or independent artisans or small businessmen. But by 1910, less than one-third of all men were self-employed.

Manhood was vanishing, critics wrote, as men became mere 'cogs in urban machines, no longer having control over their labor.

Cities represented "civilization, confinement and female efforts to domesticate the world," as one 19th century critic put it.

Cities came to represent culture, which was equated with femininity to the point that intellectual achievement was seen to be unmasculine (a viewpoint not unfamiliar today).

The Boy Scouts were founded in 1911 in large degree because of a worry about the "feminization" of young boys who spent their days in the female world of school.

It was against this backdrop that Teddy Roosevelt's hyperrnasculinity-his image of Rough Riders charging up San Juan Hill, of constant, feverish activity-strode onto the world stage. It wasn't secure manhood that the Rough Riders represented, but the anxiety of the time about what men were, or ought to be.

World War I represented another crisis for the male image; Americans were shocked when nearly half the recruits were physically or mentally disqualified for military service. "In these and other ways," writes Joseph Pleck, an authority on men's issues, "American men in the 19th and 20th centuries were having trouble meeting male demands."

Political democracy and the influx of immigrants were also reducing the idea of free and independent American manhood. In the cities, the rows of tenements that housed immigrants with their alien tongues and cramped lives were seen as sapping the vitality of traditional manhood.

The result was a cult of anti-modernism in which men looked to the past for male-warrior role models-to medieval knights, Oriental knights and the Deerslayer. Just as today's men flock to "Lethal Weapon" and "The Terminator" for the comfort of certainty in an uncertain time, our ancestors looked backward to a time when men were men...

If the 19th and early 20th centuries weren't such good times for men, how about the 1950s1 John Wayne rode tall in the saddle, Father Knew Best and women were safe at home raising the kids. Surely, that must have been a time when men were secure.

Actoally, it wasn't.

As Harry Brad, the editor of "The Making of Masculinities," writes, "The nostalgic male eye that looks longingly back to the 1950s... forgets that this was a period of pervasive fear among the white middle class that men were being emasculated and turned into robotized organization men in indistinguishable gray flannel suits."

In fact, as one looks backward through history, it becomes clear that the definition of manhood has always been in flux.

At every crossroads, gender roles were renegotiated, the notion of fatherhood changed and both sexes worried about what was happening to men. Perhaps even Adam spent a lot of post-Eden time wondering why he wimped out and ate the apple proffered by Eve.

As author and essayist Catherine Stimpson, dean of the graduate school at Rutgers, writes, "In part, the word 'man' is perplexing because each historical period, every society and each group within a society interprets the raw materials of existence in its own way . . . Like all human constructs, gender systems can change."

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#### B. Discussing Information and Issues Presented in the Reading

- 1. What seems to be this writer's main point? Do you think the writer makes a convincing argument? Why or why **not?**
- 2. According to the writer, "the definition of manhood has always been in flux." What three examples can you give to support or refute this statement? List your examples and then compare ideas with your classmates.
- 3. The article suggests that male-warrior role models such as medieval knights and heroes from movies such as *Lethal Weapon* and *The Terminator* become popular whenever men's roles are being redefined by society. What male-warrior models are popular today? With your classmates, think of examples from movies, games, television, and books.
- 4. Respond to Stimpson's statement, "Like all human constructs, gender systems can change." What human constructs besides gender systems can change? What changes have taken place in your lifetime, or in history? Consider the following areas of society:
  - a. government
  - b. education
  - c. international relations
  - d. work and employment
  - e. family
  - f. any other areas you can think of

#### C. Reading 2: Reading an Essay from a Book

This short essay is part of a collection of essays called **To Be** a Man. All of the readings in this book are essays written by men, about men. The editor who collected these articles hopes that the book will provide a resource for men lor women) who want to reflect on men's roles and men's place in modem society. Before you read the essay, answer the questions below.

- 1. What is male-bashing? Read the first three paragraphs of the essay below and then get together with several classmates and write a definition of this term. Compare your definition with the definitions of the other groups in your class.
- **2.** What effect might male-bashing have on men? On children? On male-female relationships? Write your ideas in the chart below. Then read the essay and add the writer's ideas to your chart.

Effects of male-bashing	My ideas	The <b>writer's</b> Ideas
on men		
on children		
on women		
on male-female relationships		

### **Male-**Bashing

#### by Fredric Hayward

By far. "Male-Bashing" is the most popular topic in my current talk shows and interviews. Reporters and television crews have come to me from as far away as Denmark. Australia. and Germany to investigate this American phenomenon. What is going on. they ask? Why do women want it? Why do men allow it?

The trend is particularly rampant in advertising. In a survey of 1.000 random advertisements. one hundred percent of the jerks singled out in male-female relationships were male. There were no exceptions. That is, whenever there was a husband-wife or boyfriend-girlfriend inter-

action. the one who was dumped on was the male.

One hundred percent of the ignorant ones were male. One hundred percent of the incompetent ones were male. One hundred percent of the ones who smelled bad (mouthwash and detergent commercials) were male. One hundred percent who were put down without retribution were male. (Sometimes the male would insult the female. but she was always sure to get him back in spades before the commercial ended.) One hundred percent of the objects of rejection were male. One hundred percent of the objects of anger were male. One hundred percent of the objects of violence were male.

In entertainment, the trend is similarly raging. Some television shows are little

more than a bunch of anti-male jokes strung together. Deciding to count the phenomenon during one episode of "Golden Girls," I found thirty-one women's Insults of men compared to two men's Insults of women. Family sitcoms like "The Cosby Show" or "Family Ties" have an unwritten rule that mothers are never to be the butt of jokes or made to look foolish.

As to literature, just glance through the recent best-seller lists. There Is not antifemale literature that matches the tone of Smart Women, Foolish Choices; Women Who Love Too Much; Men Who Can't Love; Men Who Hate Women and the Women Who Love Them Two authors told me about pressure from their editors to create antimale titles as a way of Increasing sales. The closest thing to a female flaw that one can publicly acknowledge Is that women tend to "love too much."

Products also reflect the popularity of hating men. One owner of a greeting card store reported that male-bashing cards are her biggest-selling line. 3M sells a variety of Post-It notes such as, "The more I know about men, the more I like my dog," and "There are only two things wrong with men ... everything they say and everything they do." A 3M spokesperson added that they have no Intention of selling similarly anti-female products. Walk through any T-shirt store and compare the number of anti-female slogans to the number of antimale slogans. Women might take offense at sexual Innuendos, but there Is a qualitative difference between something that is Interpreted as Insulting and something that Is Intended to be insulting.

With news coverage and school curricula fanning the flames, It Is no surprise that judges and legislators also punish men. Most people seem to buy the common assumption that the man is always wrong. For example, I have had almost identical discussions with several people recently. Each person first told me that divorce laws

should be harsher toward men for, they maintained, it Is too easy for men to abandon their families.

Statistics would Imply, however, that If divorce Is too easy on anyone, It Is too easy on women. When I Informed them that It Is women who currently initiate the overwhelming majority of divorces, they revised their logic: Each one of them concluded that men are so bad that women must leave a marriage in order to liberate themselves from these "oppressive men." In other words, no matter who leaves whom, the conclusion will be always that the man Is at fault.

The result Is that we encourage women not to Improve themselves. So-called "self-help" books simply "help" women adjust to an inferior pool of men. When every problem can be blamed on male inadequacy, women lose the motivation to examine crit-Ically their own patterns of behavior. **As** a result, women lose out on one of the most rewarding experiences of human life: genuine self-Improvement.

Very few women have ever been aware of what female chauvinism is, let alone made any progress toward overcoming It. ArtIcles telling women that they are communicative, more empathetic, more prepared to be Intimate and committed, more liberated, etc., than men, combined with the still common assumption that a man Is not eligible unless he Is even older, wiser, taller, more successful, and wealthier than a woman, have produced an aura of fear in women. A spate of articles on a mythical "shortage of eligible men" graces current literature.

Unfortunately, sexism teaches us to think of men as one giant organism that has been dominant for thousands of years, and that can handle (or even) a generation or two of abuse. The reality Is that men have the same human insecurities as women, and the generation of abuse has already had dire consequences for male mental health. Boys,

**struggling** with maturation and never knowing **anything** but the current age of abuse, suffer even more. Relationships suffer as well. In male-bashing times, disagreements lead to the man feeling blamed and the woman feeling oppressed.

Since the dawn of prehistory, the male-female relationship has been able to survive evolutionary traumas by rematnmg a perfectly balanced system. Both men and women had their own sets of prtvtleges and power. Both men and women had positive and negative stereotypes. FemInist activists were the first to **recognize** that the system was obsolete, but seem to be the last to **recognize** that the system was, at least, in balance. They disrupted the system, and that was good, they disrupted the balance, and that was dangerous.

The current male-bashing trend appeals to the female consumer, upon whose whims our economy depends. It is comforting for women to think that men are always at fault, while women are always innocent. Interestingly, male-bashing even appeals to the male mentality. Forced to compete with each other, in contrast to the way women are allowed to empathize with each other, men enjoy male-bashing las

long as the bashee is another male). Males have long had negative self-images and every man has a deep fantasy that he can be better than all the other men . . . the hero who will earn women's love by rescuing them from all the other rotten men.

For society's sake, however, and for the health of future male-female relationships, we better start to curb the excesses of male-bashing. It does not take many angry letters before an advertiser withdraws an offensive commercial or before a businessperson changes an offensive product.

The alternative, allowing male-bashing to continue its momentum, can only lead to a men's movement as angry with women, and far more violent, than the women's movement has been toward men. It is time to speak out. It is time to recognize that male-female dynamics have been far more reciprocal than feminist theory portrays. To those who insist that the female perspective is the only perspective: Your day has come and gone.

From Hayward, F. "Male-Bashing." In To8e A *Man: In Search of the Deep MaSCUline*, edited by K. Thompson. New York: Jeremy Tarcherl Perigree Books, 1991. Reprinted with permission of the author.

#### D. Discussing Information and Issues Presented in the Reading

- Watch television, and decide if you think television is guilty of male-bashing. Do commercials seem to make men look foolish? In situation comedies, who is more clever-the men in the show or the women? Report back to the class and discuss what you and your classmates found.
- 2. The author of "Male-Bashing" argues that there is a difference between what he calls male-bashing and sexual innuendos that many women find offensive. He states, "Women might take offense at sexual innuendos, but there is a qualitative difference between something that is interpreted as insulting and something that is intended to be insulting." Do you agree with the **author?** Explain your answer.
- 3. Do you think that the American media should try to be less offensive to men or **women?** Why or why not?

- 4. Hayward writes, "For society's sake, ... and for the health of future male-female relationships, we better start to curb the excesses of male-bashing." Do you agree or disagree with the author? If you believe that society should change its attitude toward men, explain what changes you believe should be made. If you believe change is not necessary, explain why.
- 5. Does male-bashing take place in your country? Explain. Does female-bashing take place in your country? Explain. Do companies in your country use insults in their commercials? Describe one.

#### **Journal Writing**

Respond to this question in your journal; Do you believe that men can be good and nurturing caregivers for children? Explain why or why not, and give support for your opinion.

#### **Research Project**

Individually or in a group, research one of the following topics and prepare an oral presentation or a paper about the topic. You may wish to use the Internet, as well as books, to locate information.

- a. Chivalry and male behavior and attitudes toward women
- b. Discrimination against men including: the divorce racket and social policies that reduce men's rights in the family; the number of men versus women in the prison system; the general denigration of men and the lack of representation of men's issues in the media
- c. The men's movement in the United States, or (name country/region)
- d. Images of men on television (or in movies) of (name the country/region)
- e. Stereotypes of male actions and desires
- f. Sexual harassment at work and in public

#### INF.ORMATION RECALL TEST

Unit Three | Sociology: Women, Men, and Changing Roles

Part One: Short-Answer Questions

Answer each question by referring to the notes you took while listening to the lectures in this unit.

Chapter 5 The Women's Movement: From Liberation to Feminism

- 1. When did organized activity on behalf of women's rights begin in the United States? In other words, how old is the women's movement in the United States?
- 2. List the ways in which women were considered "nonpersons" in the mid-1800s.
- 3. At the end of World War I, what right did women gain? State the year the right was gained in the United States.
- 4. In what ways did World War II change women's roles in the United States?
- 5. The lecturer gives the percentages of women in the United States who are firefighters and airline pilots to support his or her statement that women are entering male-dominated professions very slowly. What were the percentages for each of these professions?

	6. illustrate how women business owners are critical to the U.S. economy, and indicate in which states the greatest growth and <b>ex</b> -pansion in women-owned businesses has occurred.
	7. Indicate why women entrepreneurs are thought to be successful.
	8. List two countries that have had women presidents, and two countries that have had women prime <b>ministers</b> .
	9. The lecturer cited statistics to show that women's rate of participation in the workforce rose between 1940 and 2003. State the statistics.
	10. State one of the major obstacles to women's emancipation, according to the lecturer.
Chapter 6	The Men's Movement: What Does It Mean to Be a Man?
	1. Name the author of the book Backlash: The Undeclared War Against American Women.
	<ol><li>Name the poet who is considered to be one of the fathers of the men's movement.</li></ol>

- 3. Name the book written by the poet mentioned in the lecture.
- 4. Which American historical period do some fathers of the men's movement blame for the crisis in masculinity that today's American men are experiencing?
- 5. Name two occupations most men **had** before the Civil War in the United States.
- 6. How did men's typical occupations change at the beginning of the twentieth century?
- 7. Which group of men in the men's movement believe that men should be initiated into manhood through dance, mythology, poetry and rituals?
- 8. Barbara Brotman reports that one woman she interviewed is glad her husband has joined the men's movement because they now share responsibility for one area of their family's well-being that was previously her responsibility alone. What is this **area?**

#### Part Two: Essay Questions

Answer each essay question below in a paragraph. Use the notes you took on the lecture to provide support for the claims you make in your essay.

- 1. Describe the progress women in the U.S. have made in the areas of a employment
  - b. polities
  - Cothe home

2.	movement. Use information from the two lectures to support the similarities and differences you identify.
3.	Comment on the usefulness and need for the men's movement Use information from your notes to support your opinions.
4.	Explain three ways that gender roles have changed in the past fifty years in the U.S. and explain how these changes have affected U.S society.
5.	Choose one of the two movements in this unit (women's or men's) and identify the stated causes of the movement.
6.	Describe specific ways that World War II changed the employment situation for women in the U.S.
7.	Provide evidence that women in the U.S. are beginning to occupy leadership roles in business.
8.	List the four different perspectives on the men's movement the lecturer identified and give a brief description of each.

- **9.** Define the term "backlash" and explain why some women believe the men's movement is simply a backlash against the women's movement?
- 10. How has the family structure in North America changed as a result of the women's and men's movements? Would you anticipate similar changes in other areas of the world [for example, Asia)? Why or why not?

#### Part Three: Constructing Test Questions

Use the notes that you took on the lectures in Unit Three to write three test questions about each lecture. After you write the questions, ask a classmate to use his or her notes to answer the questions.



# Communication: The Influence of Language, Culture, and Gender

Chapter 7 | Classrooom Communication:

Language and Culture in the Classroom 78

Chapter 8 | Gender and Communication:

Male-Female Conversation as Cross-cultural Communication 89

THINK ABOUT AND DISCUSS THE MEANING OF THE FOLLOWING QUOTATION:

Language is the dress of thought.

-Samuel Johnson (1709- 1784)

English writer



# Classroom Communication: Language and Culture in the Classroom



# THINK ABOUT AND DISCUSS THE MEANINGS OF THE FOLLOWING QUOTATIO1'JS:

Speech is power; speech is to persuade, to convert, to compel.
-Ralph Waldo Emerson (1803-1882)

American philosopher and writer

When you have spoken the word, it reigns over you. When it is unspoken, you reign over it.

-Arab proverb

#### A. Preview of the Content

In today's world, it is becoming increasingly necessary to communicate with people from cultural backgrounds that are different from one's own. People, therefore, study intercultural communication to understand how culture influences the use of language. Culture shapes the ways that people use language, so naturally it affects the language of teaching and learning in classrooms. Classroom rituals, student participation, and the respect students owe and show their teachers vary among cultures. Virtually any aspect of classroom communication can be affected by the culture of teachers and students, but the lecturer today will focus on the three areas mentioned above.

The speaker bases this lecture on **the** article "Intercultural Communication and the Classroom" by Janis Andersen and Robert Powell. The article appeared in the book, *Intercultural Communication: A Reader.* The lecturer begins by defining the term, *communication*, and continues with an explanation of some of the ways that classroom communication is affected by culture. Throughout the lecture, the speaker presents specific examples of cultural differences in classroom communication to support the ideas related in the lecture.

#### B. Think About This

Think of two or three people whom you consider to be good communicators. What do they have in common? How are they different? Why are they good communicators?



Samovar, L., & Porter, R. 11991). *Interculttual Communication: A Reader* 16th ed.], Belmont, CA: Wadsworth **Publishing** Company.

### **A**. Orientation Listening

As you listen to the lecture for the first time, use the outline below to help you understand the general content of the lecture and the topics discussed. The outline should help you perceive the overall structure of the lecture and the main ideas presented by the lecturer.

#### I. Communication

- A. Definition from Samovar and Porter
  - 1. Derived from a need to interact with human beings
  - 2. Verbal and nonverbal messages
- B. Speech communication-the study of how individuals send and interpret messages
- C. Intercultural communication-the study of how sociocultural background affects communication
- D. Intercultural classroom communication

#### II. The classroom and culture

- A. A mental picture of a classroom
- B. The effect of classroom communication
  - 1. Culture-a system of knowledge
  - 2. Influences participation and the esteem in which teachers are held

#### ill. Classroom rituals

- A. Rituals are systematic procedures used to perform acts or communicate messages
- B. Examples of classroom rituals

#### IV. Classroom participation

- A. Euro-American students
  - 1. Talkative in class
  - 2. Believe that learning is shaped by talk and participation
- B. Asian students
  - 1. Less talkative in class
  - 2. Believe that they learn by listening to the teacher
- C. Vietnamese students
  - 1. Almost no classroom interaction
  - 2. Teacher controls the classroom
  - 3. Teacher is a symbol of learning and culture

#### D. German students

- 1. Value teacher's professional/personal opinion
- 2. Students do not disagree with/contradict teacher in class
- E. Israeli students can criticize teachers if they think teacher is wrong/incorrect
- V. Learning a language involves knowing not just vocabulary, idioms, and grammar, but the cultural aspects of the language as well

## **B.** Listening and Notetaking

Now that you've listened to the lecture once, listen to it again and take notes. The lecturer will present a slower-paced version of the lecture and will reiterate information so you will have time to take down the information in note form. You will be assisted in your notetaking by a notetaking mentor who will ask you to check that you wrote down important information.

### $\Omega$ C. Listening to a Recounting of the Lecture

Listen to a student recount the lecture. The student will speak in a more informal, spontaneous style, paraphrasing and summarizing the information from the lecture. **As** you listen, check to be sure that your notes are complete.

#### **III. POSTLISTENING**

#### A. Recapping the Lecture from Your Notes: Presenting the Information Orally

Recount the information you heard in the lecture to a partner, the class, or your teacher. Use your **notes** to help you relate the main ideas as well as the supporting information that you heard in the lecture.

#### B. Discussing Information and Issues Presented in the Lecture

In a group of two to four students, discuss the questions below. Your teacher may ask you to address one of the questions or all of them. During your discussion, use the information in your notes to support your ideas. At the end of the discussion, a representative from the group should summarize the group's discussion for the class.

- 1. Choose one or two of the situations below and describe what kind of classroom and teacher-student interactions would best help students learn in each situation:
  - a. learning English as a second language (that is, learning English in the United States, Canada, England, Australia, or another English-speaking country)
  - b.learning English as a foreign language (that is, learning English in your country)
  - c. learning in high school in your country
  - d.learning in graduate school in an English-speaking country or your home country
  - e. learning the most advanced knowledge of a topic in a field
  - f. learning as a senior citizen (a person over the age of sixty-five)
- 2. If we were asked to describe the ideal teacher, many of us would disagree on the basic characteristics this person would have. Identify the characteristics that you believe the ideal teacher should possess, and explain why these characteristics are so important for good teaching.
- 3. It is often said that it is fairly easy to get into an American college, but it is difficult to graduate unless you study and work hard. In some other countries it is considered very difficult to get into a university but fairly easy to graduate even if you do not study hard. What are the advantages and disadvantages of each of these systems of education! Explain how your country's systems of college admission and study are similar to or different from those of the United States.

#### IV. READING EXPANSION

#### A. Reading a Research Report

The following research report examines the types of communication and behavior that students from different cultures expect in a classroom compared to what they experience in a university classroom in the United States. Before you read the report, do the following activities.

- 1. Look at the title of the article. The word *behavior* is usually used in the singular form. Why do you think the author uses the plural?
- 2. Answer the eight-item questionnaire at the end of the article on page 87. Compare your responses with your classmates'.
- 3. Describe the behavior in a typical class at school in your **country**. Does the teacher know the students by name? Does the teacher spend most of the class time lecturing? When do students speak? Do students always raise a hand or ask for **permission?**
- 4. What have you found most different in your ESL classes?
- 5. In what ways do you like to be encouraged to speak the language that you are learning? Dialogues? Free conversation? Short recitations?
- 6. How does your ESL teacher deal with language mistakes?
- 7. Have you had foreign teachers before? How are they different from those in your country?
- 8. What do you think are some advantages of a multicultural class?

#### Classroom Etiquette: A Cross-Cultural Study of Classroom Behaviors

Kristina Beckman-Brito University of Arizona, Tucson

Cultural diversity in an ESUEFL class offers both teacher and students the opportunity to meet and become familiar with various aspects of the students'home countries. However, the resulting gulfbetween what is considered appropriate or inappropriate in a classroom setting can prove disconcerting if a teacher is not adept at interpreting those behavioral displays. This study was undertaken to compare the classroom etiquette, i.e. appropriate and inappropriate behavioral displays in an instructional setting, across eight countries (Argentina, China, Italy, Japan, Korea, Taiwan, the Ukraine and Vietnam).

#### INTRODUCTION

Understanding the various cultures ESL teachers may encounter in their classroom is an essential component in creating a positive classroom environment. If instructors are not sensitive to the cues given by a student, the teacher may misinterpret the actions, behaviors and intentions of that student. Conversely, international students, unaccustomed to American behaviors, will likely encounter similar misunderstandings. Although impossible to have a clear understanding of every culture, from a pedagogical perspective, it is important to have some sense of common behavioral displays made by students in an ESL classroom. This research was inspired by observing international graduate students, all articulate, mature and polite individuals, appear uncomfortable in an American classroom setting. It is important to recognize that if these circumstances existed for highly proficient graduate students accustomed to functioning in culturally diverse settings, the degree of discomfort would likely be magnified for other less-experienced international students. This situation suggests research is needed to explore differences between classroom etiquette in the United States and abroad. This project is an attempt to understand both what specific behaviors the international students frequently display and whythat behavior is present. Only in gaining a deeper sense of these underlying factors can an ESL teacher recognize these seemingly inappropriate or unusual behaviors as manifestations of acceptable cultural norms in the students' home countries.

#### METHODS/PROCEDURES

#### **Participants**

Eight international students from a major Southwest American university were surveyed about classroom etiquette in their home countries. All were graduate students taking coursework in English as a Second Language/Foreign Language. Participants originated from Argentina, China, Italy, Japan, Korea, Taiwan, the Ukraine, and Vietnam. Length of stay in the U.S. ranged from five months to ten years.

Data collections consisted of a three-part system in which participants completed a questionnaire that ranked particular behaviors, answered openended questions, and participated in one-on-one interviews. In the questionnaire phase, the participants, using a Ukert-scale, ranked ten behaviors from 1 (acceptable behavior) to 5 (unacceptable behavior). Questions covered topics such as Cheating, arriving late to class, forms of addressing the professor, and methods used to clarify questions during class (see tables). The participants evaluated the behaviors based on how socially acceptable those actions would be in the home countries within the context of a college or university setting. Eight open-ended questions were designed to elicit responses in greater detail about the classroom environment in the participants' home countries. These responses allowed them to elaborate on methods used to seek clarification, ways to show respect, and to further illustration other classroom dynamics such as error correction and discipline.

One-on-one interviews were conducted after the questionnaire had been completed. Responses were recorded in field notes that were later used to clarify vague responses and to discuss key issues further.

#### RESULTS

No two participants responded in a similar manner to all questions (see Table 1). All respondents indicated that consuming food or beverages in class constituted inappropriate behavior. Similarly, in the case of using the professor's first name, all participants unanimously classified this as unacceptable (5).

No significant differences were noted between participants' attitudes towards arriving three or seven minutes late to class. All respondents, except the Chinese participant, ranked them either the same or one numerical value higher (toward unacceptable). The respondent from China evaluated a three-minute arrival with a score of three (3); however, she considered arriving seven minutes late to be highly unacceptable (5) behavior for a student.

No distinct pattern was noted between two seemingly related questions about asking the professor questions during class and offering personal comments views during class. All respondents, except the participant from Italy, deemed asking questions during class as acceptable to moderately acceptable. Three trends were noted when comparing the two questions on class-room participation: deemed equally acceptable, more acceptable, or less acceptable, respectively. While some participants (from Korea, Ukraine, Italy) evaluated the two behaviors the same, three (from Japan, Taiwan, Vietnam) considered offering comments more offensive, while two (from Argentina and China) assigned lower rankings. Table 1 below presents the results obtained.

Table 1: Participants' Perception of Acceptability of Various Classroom Behaviors

	Acceptable		Unacceptable		
	1	2	3	4	5
Asking the professor questions during class	K,V	A	C,J,T,U		ı
Eating/drinking during class					A.C,I.J. <b>K,T,U,V</b>
Cheating on an exam	Т		А	U	C, f,J, K, V
Leaving class to use the restroom	А	U	C,I,K,V	Т	J
Arriving three (3) minutes late to class	A.K	I	C,U,V	Т	J
Arriving seven (7) minutes late to class	К	А	I, U	V	C.J, T
Offering personal comments!views during class	A,C,K	V	U		I.J, T
Using the professor's first name					<b>Ate,f,J, K,</b> T,U, <i>V</i>
Responding "I don't know" to a question	J. K	C. T	I, V	U	A
Whispering to a classmate for clarification	A, K	C.I, T	U	J	V

Legend:

A=Argentina, C=China. 1=Italy, J=Japan. K=Korea. T=Taiwan, U=Ukraine, V=Vietnam

While the written survey provides insight into the participants' categorical determinations of appropriateness of particular behaviors, the underlying reasons why those determinations were made is not revealed. In order to appreciate the rationale for the responses, one-on-one interviews were conducted with the participants.

#### CONCLUSION

Most ESL classrooms are comprised of a markedly diverse student population. As seen in the varied responses and personal recollections, each member of an ESL classroom brings their own understandings and expectations of what is deemed appropriate or inappropriate in a classroom. Based on these understandings, students will behave accordingly. Only after time and exposure to American classrooms, might these behaviors begin to change. Further, each student will adapt in a unique manner and at his or her own pace, if at all. However, during this transitional period, teachers may brand international students as rude, inconsiderate, or inattentive. Since many instructors include participation as one factor when evaluating student performance and calculating final grades, points for lack of participation (as viewed by the instructor) may be deducted. As a result, these misunderstandings can adversely affect the students' academic standing. These difficulties extend to awkward interactions with professors, assumptions about cheating and students' expectations about error correction and forms of discipline.

It is this myriad of potential difficulties (misinterpretations of behaviors and the resulting detrimental effect on grades) that necessitates further research into the area of classroom etiquette. While this study presents the perspectives of eight international students, the number of participants is quite limited. SUbsequent studies using a larger pool of participants would expand and enrich our insight into the experiences of our non-native students. A second limitation of this study is that only one student from each country was interviewed. Gathering insight from several members of the same country would offer a broader representation of their learning backgrounds. Understanding multiple perspectives, whether shared or dissimilar, offer ESL teachers a keener sense of the range of possible learning experiences.

In addition, a comparison of Asian countries may help to dispel the myth that *all* Asians form a homogeneous group. At present, the literature portrays the Asian community as a single, cohesive entity. This overgeneralization misleads the instructional community to make false presumptions. As evidenced in this study, no two Asian participants responded in a similar manner to the study questions. Therefore, it follows that students' classroom behaviors cannot be interpreted in the same manner. A comprehensive, contrastive study, with a limited scope of only Asian cultures, could prove useful in providing background into the variety of the cultural norms that influence classroom behavior.

With more extensive work in this area, teachers will become more capable of understanding and even appreciating, the multitude of behaviors manifested in their classrooms. With this insight, teachers then have a starting point for discussion with their students about appropriate and inappropriate behaviors in American classrooms. Empowering students

with this knowledge will ease the transition in adapting to a new environment, thereby benefiting both students and teachers. Rather than placing an additional instructional burden on teachers, discussing these issues will create a more positive classroom environment, which will, in turn, enhance learning.

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# Appendix I Survey of Classroom Etiquette

My home country is

Part 1 Please rate the following in-class behaviors from: Acceptable (1) to Unacceptable (5). Answer as if you were a student in your home country.

- 1 2 3 4 5 Asking the professor questions during class time
- 1 2 3 4 5 Eating/drinking during class
- 1 2 3 4 5 Cheating on an exam
- 1 2 3 4 5 Leaving the classroom to use the restroom
- 1 2 3 4 5 Arriving three (3) minutes late to class
- 1 2 3 4 5 Arriving seven (7) minutes late to class
- 1 2 3 4 5 Offering your personal comments lyiews during classroom discussion
- 1 2 3 4 5 Using the professor's first name
- 1 2 3 4 5 Responding "I don't know" to a question
- 1 2 3 4 5 Whispering to a classmate for clarification

#### Part 2 General Questions

- 1. How do you demonstrate to the teacher that you are attentive? Is this even important to do?
- 2. What kind of discipline is used in the classroom?
- 3. If you do not understand something in class, how do you get clarification? Does the teacher confirm that the material is understood by all?
- 4. How do you feel about direct error correction?
- 5. How do you show your teacher respect?
- 6. What indicators tell you that class has begun/ended?
- 7. Is humor used in the classroom?

#### B. Discussing Information and Issues Presented in the Reading

- 1. Work in a small group. Record the group members' rankings in the table below.
- 2. In your group you might include any of the following class behaviors in addition to those used in the study.
  - (11 Leaving class early to meet someone
  - (21 Answering a cell phone call during class
  - (31 Correcting a professor's error in computation or fact
  - (41 Yawning in class when you're tired or bored

	Acceptable			Unacceptable		
	1	2	3	4	5	
Asking the professor questions during class						
Eating/drinking during class						
Cheating on an exam						
Leaving class to use the restroom						
Arriving three (3) minutes late to class						
Arriving seven (7) minutes late to class						
Offering personal comments/views during class						
Using the professor's first name						
Responding "I don't know" to a question						
Whispering to a classmate for clarification						

3. Analyze your results in the table. Report your findings to the class.

#### **Journal Writing**

Respond to the following in your journal: Describe one or both of the following individuals and explain why you feel the way you do about the person or persons and what you would say to that person if you met him or her today:

- a. your favorite teacher of all time
- b. your least favorite (most disliked) teacher of all time

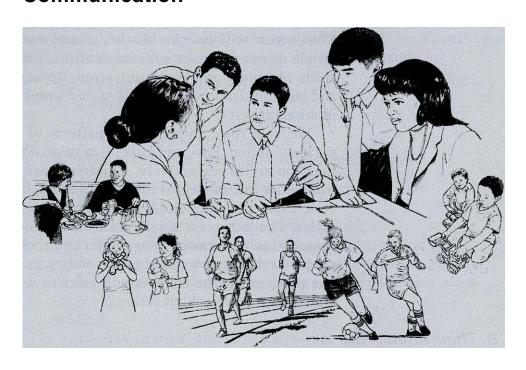
#### **Research Project**

Interview two or three classmates about their most serious misunderstanding in cross-cultural communication. Get as many details as possible. Then ask them for their most humorous misunderstanding. Be prepared to report to your group or class. Be sure to point out things like misuse or misunderstanding of vocabulary.



### **Gender and Communication:**

# Male-Female Conversation as Cross-cultural Communication



# THINK ABOUT AND DISCUSS THE MEANINGS OF THE FOLLOWING QUOTATIONS:

I am always ready to learn, but I do not always like being taught.

-Winston Churchill (1874-1965)

British politician and statesman

The teacher is one who makes two ideas grow where only one grew before.

-Elbert Hubbard (1856-1915)

American writer

#### A. Preview of the Content

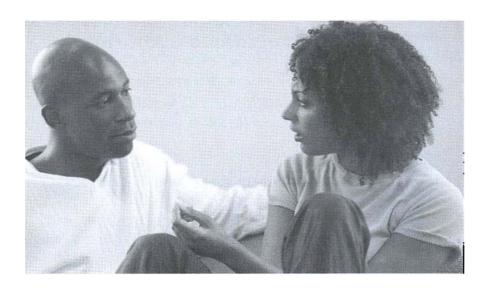
The last lecture introduced you to the field of intercultural communication and one area of study in this field: classroom communication. This lecture Will describe another area of study in this field that many people do not associate with intercultural communication. This is the study of gender and communication. Researchers who study gender and communication have realized that women and men communicate in different ways.

We learn the communication patterns of our gender from the time we are children. Boys and girls learn masculine and <u>feminine</u> communication styles respectively. Children learn these patterns not only from older role models of their own gender, but from other children as well. Even the games children play help to build these communication styles. The lecturer will talk more about how children learn the communication patterns of their gender and about some false stereotypes people have of men's and women's communication patterns. Throughout the lecture, the speaker will refer to research that supports her claims.

#### B. Think about This

What differences have you noticed between male and female styles of conversation in your **language** and in English in the following situations:

- co-workers at a business meeting
- friends at a party
- students studying for an exam
- students in a small-group classroom
- students in a large lecture hall
- family at a formal dinner
- men and women on a first date
- admiting a male or female classmate's clothes



### **A** A. Orientation Listening

As you listen to the lecture for the first time, use the outline below to help you understand the general content of the lecture and the topics discussed. The outline should help you perceive the overall structure of the lecture and the main ideas presented by the lecturer.

- I. Gender and communication
  - A. Gender is learned
    - 1. Boys learn to be masculine
    - 2. Girls learn to be feminine
  - B. Men and women communicate in different ways
- II. Children can learn communication patterns from play
  - A. Boys
    - 1. Play outside in large hierarchical groups
    - 2. There is a leader-giving orders = higher status
    - 3. Play games with set rules; tell stories and make jokes
    - 4. Command attention by giving orders and setting rules
    - 5. Winners and losers
  - B. Girls
    - 1. Play in small groups or pairs-not large groups
    - 2. Play at home
    - 3. Every girl gets a chance to play
    - 4. No winners or losers
    - 5. Make suggestions not give orders
  - C. Boys and girls both want to get their way but they try to do so in different ways
  - D. Comparison of boys and girls doing a group task (Goodwin)
    - 1. Boys had a leader
    - 2. All girls made suggestions
    - 3. Girls have a leader when they play house but this structure occurs less in often in girls' games
- III. Stereotypes about gender and communication
  - A. Common stereotype-women talk too much
  - B. Research shows that men talk more-particularly in public settings
    - 1. University faculty meetings (Eakins and Eakins)
      - a. Men spoke more often
      - b. Men talked longer
    - 2. Women professors speak less at departmental meetings [Simeone]
  - C. Social concept of what is feminine and masculine
- IV. Researchers study gender's effect on communication to understand why misunderstandings between men and women occur

# $oldsymbol{\Omega}$ B. Listening and Notetaking

Now that you've listened to the lecture once, listen to it again and tak notes. The lecturer will present a slower-paced version of the lectur and will reiterate information so you will have time to take down the information in note form. You will be assisted in your notetaking by notetaking mentor who will ask you to check that you wrote dow
important information.

### C. Listening to a Recounting of the Lecture

Listen to a student recount the lecture. The student will speak in a more informal, spontaneous style, paraphrasing and summarizing the information from the lecture. As you listen, check to be sure that your notes are complete.

#### III. POSTLISTENING

#### A. Recapping the Lecture from Your Notes: Presenting the Information Orally

Recount the information you heard in the lecture to a partner, the class, or your teacher. Use your notes to help you relate the main ideas as well as the supporting information that you heard in the lecture.

#### B. Discussing Information and Issues Presented in the Lecture

In a group of two to four students, discuss the questions below. Your teacher may ask you to address one of the questions or all of them. During your discussion, use the information in your notes to support your ideas. At the end of the discussion, a representative from the group should summarize the group's discussion for the class.

- 1. Explain why communication between men and women can be considered cross-cultural communication. What sorts of misunder-standings might men and women encounter because of their different styles of communication?
- 2. Compare and contrast girls' play and boys' playas described in the lecture. What are the similarities and differences? How do these different play styles affect the way children learn to communicate?
- 3. Describe some of the differences between men's talk and women's talk that occur in your culture. As you share these differences with the class, tell the class what other people would think of an individual who adopted the communication style of the other gender. In other words, what would people say about a woman who used a masculine communication style and vice versa?

#### IV. READING EXPANSION

#### A. Reading a Book Excerpt

The following two passages are from the book You *Just Don't Understand* by Deborah Tannen. Before you read these passages, answer the questions below.

1. What do you know about Deborah Tannen from the lecture in this unit? Look back over your notes and share ideas with your classmates.

- 2. Read the titles of the two passages. What do they mean to you? Share your interpretations with your classmates.
- 3. Based on what you already know about Deborah Tannen, what do you expect the following passages to be about? Compare ideas with your classmates.

#### His Politeness Is Her Powerlessness

#### by Deborah Tannen

There are many different kinds of evidence that women and men are judged differently even if they talk the same way. This tendency makes mischief in discussions of women, men and power. If a linguistic strategy is used by a woman, it is seen as powerless; if it is used by a man, it is seen as powerful. Often, the labeling of "women's language" as "powerless language" reflects the view of women's behavior through the lens of men's.

Because they are not struggling to be one-up, women often find themselves framed as one-down. Any situation is ripe for misinterpretation because status and connections are displayed by the same moves. This ambiguity accounts for much misinterpretation by experts as well as nonexperts, by which women's ways of talking, uttered in a spirit of rapport, are branded powerless. Nowhere is this inherent ambiguity clearer than in a brief comment in a newspaper article in which a couple, both psychologists, were jointly interviewed. The journalist asked them the meaning of "being very polite." The two experts responded simultaneously, giving different answers. The man said, "Subservience." The woman said, "Sensitivity." Both experts were right, but each was describing the view of a different gender.

Experts and nonexperts alike tend to see anything women do as evidence of powerlessness. The same newspaper article quotes another psychologist as saying, "A man might ask a woman, 'Will you please go to the store?' where a woman might say, 'Gee, I really need a few things from the store, but I'm so tired.'" The woman's style is called "covert," a term suggesting negative qualities like being "sneaky" and "underhanded." The reasons offered for this is power: The woman doesn't feel she has a right to ask directly.

Granted, women have lower status than men in our [American] society. But this is not necessarily why they prefer not to make outright demands. The explanation for a woman's indirectness could just as well be her seeking connection. If you get your way as a result of having demanded it, the payoff is satisfying *in* terms of status: You're one-up because others are doing as you told them. But if you get your way because others happened to want the same thing, or because they offered freely, the payoff is rapport. You're neither one-up nor one-down but happily connected to others whose wants are the same as yours. Furthermore, if directness is understood by both parties, then there is nothing covert about it: That a request is being made is clear. Calling an indirect communication covert reflects the view of someone for whom the direct style seems "natural" and "logical"-a view more common among men.

Indirectness itself does not reflect powerlessness. It is easy to think of situations where indirectness is the prerogative of others in power. For example, a wealthy couple who knows that their servants will do their bidding need not give direct orders, but can simply state wishes: The woman of the house says, "It's chilly in here:' and the servant sets about raising the temperature. The man of the house says, "It's dinner time," and the servant sees about havi.ng dinner served. Perhaps the ultimate indirectness is getting someone to do something without saying anything at all: The hostess rings a bell and the maid brings the next course; or a parent enters the room where children are misbehaving and stands with hands on hips, and the children immediately stop what they're doing.

Entire cultures operate on elaborate systems of indirectness. For example, I discovered in a small research project that most Greeks assumed that a wife who asked, "Would you like to go to the **party?"** was hinting that she wanted to go. They felt that she wouldn't bring it up if she didn't want to go. Furthermore, they felt, she would not state her preference outright because that would sound like a demand. Indirectness was the appropriate means for communicating her preference.

Japanese culture has developed indirectness to a fine art. For example, a Japanese anthropologist, Harumi Befu, explains the delicate exchange of indirectness required by a simple invitation to lunch. When his friend extended the invitation, Befu first had to determine whether it was meant literally or just *pro forma*, much as an American might say, "We'll have to have you over for dinner some time" but would not expect you to turn up at the door. Having decided the invitation was meant literally and having accepted, Befu was then asked what he would 'like to eat. Following custom, he said anything would do, but his friend, also following custom, pressed him to specify. Host and guest repeated this exchange an appropriate number of times, until Befu deemed it polite to answer the question-politely-by saying that tea over rice would be fine. When he arrived for lunch, he was indeed served tea over rice--as the last course of a sumptuous meal. Befu was not surprised by the feast because he knew that protocol required it. Had he been given what he asked for, he would have been insulted. But protocol also required that he make a great show of being surprised.

This account of mutual indirectness in a lunch invitation may strike Americans as excessive. But far more cultures in the world use elaborate systems of indirectness than value directness. Only modem Western societies place a priority on direct communication, and even for us it is more of a value than a practice.

Evidence from other cultures also makes it clear that indirectness does not in itself reflect low status. Rather, our assumptions about the status of women compel us to interpret anything they do as reflecting low status. Anthropologist Elinor Keenan, for example, found that in a Malagasy-speaking village on the island of Madagascar, it is women who are direct and men who are indirect. And the villagers see the men's indirect way of speaking, using metaphors and proverbs, as the better way. For them, indirectness, like the men who use it, has high status. They regard women's direct style as clumsy and crude, debasing the beautiful subtlety of men's language. Whether women or men are direct or indirect differs; what remains constant is that the women's style is negatively valued-seen as lower in status than the men's.

#### IT'S DIFFERENT COMING FROM A MAN

Research from our own [American] culture provides many examples of the same behavior being interpreted differently depending on whether it's done by women or men. Take, for example, the case of "tag questions"-statements with little questions added onto the end, as in "It's a nice day, isn't it?" Linguist Robin Lakoff first pointed out that many women use more tag questions than men. Though studies seeking to test Lakoff's observations have had somewhat mixed results, most support it. Jacqueline Sachs, observing the language of children as young as two to five, found that girls used more than twice as many tag questions as boys. And research has shown that women *expect* women to use tags. Psychologists David and Robert Diegler conducted an experiment asking adults to guess the sex of speakers. Sure enough, the stereotype held: Subjects guessed a woman was speaking when tags were used, a man when they weren't. The stereotype can actually be more compelling than reality: In another experiment, psychologists Nora Newcombe and Diane Aniskoff presented adults with communications in which men and women used equal numbers' of tag questions, and found that their subjects thought the women had used more.

Most troubling of all, women and men are judged differently even **if** they speak the same way. Communications researcher Patricia Hayes Bradley found that when women used tag questions and disclaimers, subjects judged them as less intelligent and knowledgeable, *but men who advanced arguments without support were not*. In other words, talking the same way does not have this effect on men. So it is not the ways of talking that are having the effect so much as people's attitudes toward women and men.

Many other subjects have had similar results. Psychologists John and Sandra Condry asked subjects to interpret why an infant was crying. If they had been told the baby was a boy, subjects thought he was angry, but if they had been told it was a girl, they thought she was afraid. Anne Macke and Laurel Richardson, with Judith Cook, discovered that when students judged professors, generating more class discussion was taken to be a sign of incompetence-e-only if the professor was female.

**pp. 224–8** from YOU JUST DON'T UNDERSTAND by DEBORAH TANNEN Copyright © 1990 by DEBORAH TANNEN.

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### B. Discussing Information and Issues Presented in the Reading

- 1. What would you say is Tannen's main point in the first passage? Try to summarize her main point in one sentence. Then compare sentences with your classmates.
- 2. Thinkabout how a woman from your culture might
  - a. apologize for being late
  - b. ask a friend for a favor
  - c. respond when a friend is late

Now think how a man might respond in these situations. Based on your answers, would you say that men and women in your culture communicate differently? Share your thoughts with your classmates.

3. Choose one of the situations below to role-play with a partner. Practice your conversation and then role play it for your classmates.

- a. A man invites a woman to lunch and she declines.
- b. A man invites a male friend to lunch and he declines.
- c. A woman needs her husband to help with something at home.
- d. A man needs his wife to help with something at home.
- e. A student asks a professor for an extra day to complete an assignment that is due.
- 4. What are some politeness strategies that exist in your native language? Are these strategies similar to or different from politeness strategies in English? Describe these differences to the class and relate any miscommunication that you think could occur between people from the **U.S.** and your culture.

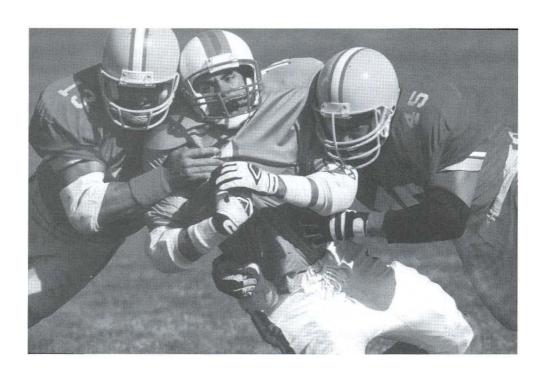
### **Journal Writing**

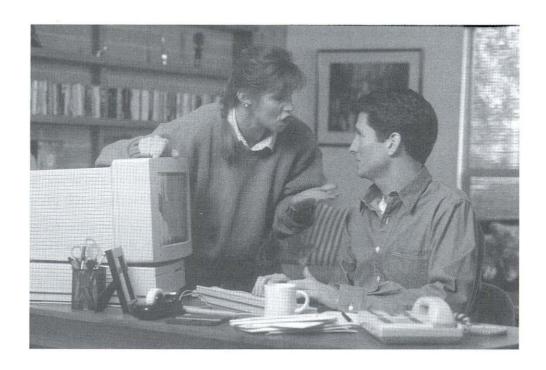
Respond to the following in your journal: Interview five Americans to find out if they believe American men and women have different ways of expressing themselves, and how these styles of communication differ. Also, ask the interviewee if he or she can share any proverbs about these different styles, like the one you heard in the lecture about foxes' tails and women's tongues. Report your findings in your journal.

### **Research Project**

Find six informants who are not in your class: three men and three women. Show the two photographs on page 98 to each informant. Proceed as follows:

- 1. Interview each informant individually.
- 2. Tell your informants to study each picture carefully for a few minutes.
- 3. Ask your informants to describe each picture carefully.
- 4. Instruct them to use as many adjectives as they can to clearly describe the picture, including the action, clothing, facial expressions, and so forth.
- 5. Record or transcribe your informants' responses as accurately as you can.
- 6. Compare the adjectives and expressions used by the male informants with those used by the female informants. Note the similarities and differences of the language used by each of the subjects.
- 7. Prepare a report for the class summarizing your findings.





### INFORMATION RECALL TEST

### **Unit Four**

Communication:
The Influence of Language, Culture, and Gender

Part One: Short-Answer Questions

Answer each question by referring to the notes that you took while listening to the lectures in this unit.

- Chapter 7 Classroom Communication: Language and **Culture** in the Classroom
  - 1. Define the term *communication*.
  - 2. What is the title of the article by Andersen and Powell on which this lecture is based?
  - 3. Define *ritual* and give one example of a classroom ritual.
  - 4. Which group of students mentioned in the lecture generally believe that they will learn best by listening to and absorbing the knowledge being given to them by the teacher?
  - 5. According to Andersen and Powell, in which country is classroom communication very tightly controlled by the teacher?
  - 6. Which culture mentioned considers teachers to be honored members of society?

	7. According to the lecture, students of what nationality value the personal opinions of the instructor and do not customatily disagree with a teacher?
ChapterS	Gender and Communication: Male-Female Conversation as Cross-eultural Communication
	1. Define the term <i>gender</i> .
	2. Who wrote the book You Just Don't Understand?
	3. List three characteristics of typical boys' play.
	4. List three characteristics of typical girls' play.
	5. In Marjorie Harnass Goodwin's research, what task did the girls perform?
	6. How does the structure of the girls' game "house" differ from the structure of other girls' games like hopscotch and jump rope?
	7. What common stereotype about women is disproved by the studies that examined talk by male and female professors in university meetings?

8. Name the culture in which a wife is expected to paraphrase any words that sound like the name of her father-in-law or brothers.

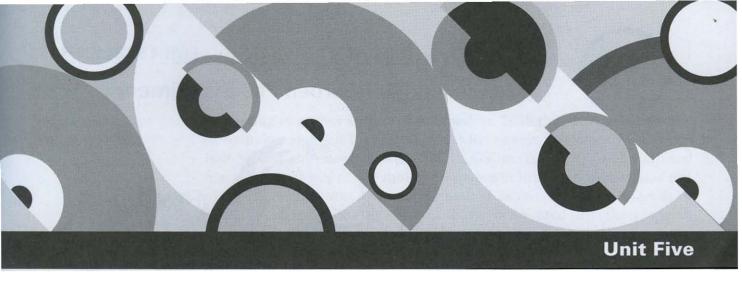
### Part Two: Essay Questions

Answer each essay question below in a paragraph. Use the notes that you took on the lectures to provide support for the claims you make in your essay.

- 1. Explain how people's perceptions of reality and their behavior are shaped by culture. Consider an individual's mental picture of a classroom and the stereotype that women talk more than men when answering.
- **2.** Analyze the ways that children's play can shape the patterns of communication children later adopt when they grow up.
- 3. Compare and contrast the communication patterns in typical North American boys' games and typical North American girls' games.
- 4. Name two aspects of communication that are affected by culture and provide specific **examples** of how these aspects of communication differ among cultures.
- 5. Agree or disagree with the following statement: "Male-female conversation is not cross-cultural communication." Be sure to support your argument with facts and details.
- 6. Define cross-cultural communication using examples from the two lectures.

### Part Three: Constructing Test Questions

Use the notes that you took on the lectures in Unit Four to write three test questions about each lecture. After you write the questions, ask a classmate to use his or her notes to answer the questions.



# Biology: Understanding Genetics to Genetic Engineering

Chapter 9

### The Origins of Genetics:

Mendel and the Garden Pea Experiment 104

Chapter 10

### **Genetic Engineering in the Biotech Century:**

Playing It Smart or Playing Roulette with Mother Nature's Designs? 114

## THINK ABOUT AND DISCUSS THE MEANING OF THE FOLLOWING QUOTATION:

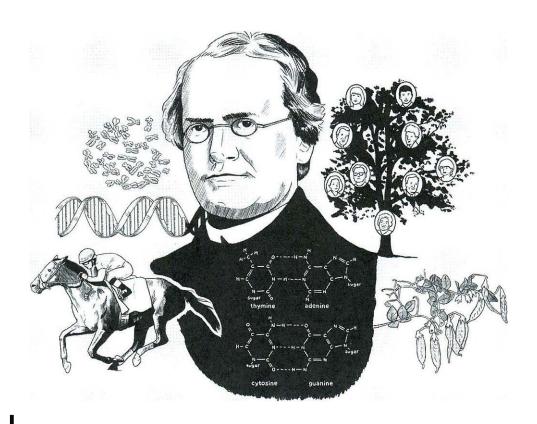
Biology once was regarded as a languid, largely descriptive discipline, a passive science that was content, for much of its history, merely to observe the natural world rather than change it. No longer. Today biology, armed with the power of genetics, has replaced physics as the activist Science of the Century and it stands poised to assume godlike powers of creation, calling forth artificial forms of life rather than undiscovered elements and subatomic particles.

-Barry Commoner

Senior scientist at Queen's College, City University of New York. Cited in *Harper's Magazin e*, February 2002



## The Origins of Genetics: Mendel and the Garden Pea Experiment



## THINK ABOUT AND DISCUSS THE MEANINGS OF THE FOLLOWING QUOTATIONS:

We do not know, in most cases, how far social failure and success are due to heredity, and how far to environment. But environment is the easier of the two to improve.

**-J.** B. S. Haldane (1892-19641

English geneticist

The cloning of humans is on most of the lists of things to worry about from Science, along with behaviour control, genetic engineering, transplanted heads, computer poetry and the unrestrained growth of plastic flowers.

-Lewis Thomas (1913-1993)

American physician and biologist

**Nothing** shocks me. I'm a scientist.

-Harrison Ford (1942-1, as Indiana Jones

American actor

### I. PRELISTENING

### A. Preview of the Content

According to author Laura Hillenbrand, in 1938 the year's number-one newsmaker was not Franklin Delano Roosevelt, Hitler, or Mussolini. Nor was it the famous actor, Clark Gable. In 1938, in the United States, the subject of the most newspaper columns in inches was not even a person. It was a racehorse named Seabiscuit. For hundreds of years racehorses like Seabiscuit have been bred for their speed, strength, and size. The miniature horses we call Shetland ponies were originally bred for their strength, as well as their *small* size so they could be used to pull coal cars in coal mines. Today, the small size of these Shetland ponies makes them ideal" for young children to ride.

What allows racehorses, miniature horses (and other animals, such as cows], and even plants to be bred for particular qualities has a lot to do with the subject of biology, in general, and the subject of genetics and heredity, in particular. In today's lecture, you'll learn something about the origins of the field of genetics, and the experiments of Gregor Johann Mendel, who in the mid-1800s developed a theory of heredity. This theory attempted to explain how traits are passed from one generation to the next.

### B. Think about This

Think about a recent experiment you carried out in biology, chemistry, or some other science. Also, think about an unscientific (but funl] experiment you carried out in which you observed people and noted how they behaved under certain conditions, perhaps at a party or a meeting. Explain what made the experiment you did in biology, physics, chemistry, a rigorous "scientific experiment," and what made your observation of people an enjoyable, but not very rigorous experiment. What makes an experiment rigorous and enlightening for science?

### **A**. Orientation Listening

**As** you listen to the lecture for the first time, use the outline below to help you understand the general content of the lecture and the topics discussed. The outline should help you perceive the overall structure of the lecture and the main ideas presented by the lecturer.

- I. A few simple questions
  - A. Why do people (cats, dogs, birds) look different?
  - B. Why do you look different from your sister/brother?
  - C. Answer is in the genes-control how creatures look, function, behave, reproduce
- II. Genes are found inside cells of the body and passed from one generation to the next
  - A. Color of hair-mother; ability to roll tongue-father; other traits may be from great-grandfather
  - B. Traits determined by combination of genes
  - C. Humans share same genes with fruit fly/Bonobo (97 percent)
  - D. Study of genes-branch of biology-genetics and geneticists
  - E. Field of genetics dates to mid-1800s; most of what we know today learned in last few decades
- . III. Gregor Mendel (1822-1884J-studied pea plant
  - A. 1856-1863 Mendel grew 28,000 pea plants and kept records
    - 1. Saw pattern-principles-Mendelian Laws of Heredity
    - 2. (Aside—Mendel nervous about exams-didn't finish university degree; still Mendel did research and became famous)
    - 3. Passing of traits (color of eyes, texture of hair, others?)
  - B. From earliest times, interest in studying how heredity works
    - 1. Learn how to alter crops (corn I-more plentiful and taste better
    - 2. Learn how to improve domestic animals-more valuable racehorse-famous racehorse Seabiscuit (son of Man of War) faster than other horses though Seabiscuit small
  - C. Before DNA and chromosomes discovered, heredity was mystery
    - 1. Mendel studied science at University of Vienna
    - 2. Used math to explain natural phenomena
    - 3. Studied work of Knight-crossed variety with violet/white flowers: Violet + white = all offspring violet. However, in next generation (violet + violet = white + violetl-s-puzzle
    - 4. Mendel repeated Knight's work on *Pisum sativum* but used math and statistics to predict results

- IV. Why did Mendel study the garden pea (Pisum sativum)?-good reasons to use plant
  - A. Was available and plentiful-Austria
  - B. Could be cultivated quickly, little effort
  - C. Produces large number of offspring
  - D. Has traits that have two clearly different forms (color)
  - E. Matures quickly and has lots of offspring
- V. We still benefit from work of Mendel-understand more about geneticsfheredity
  - A. Genes are tiny biochemical structures in cells that determine traits
  - B. But gene gives only potential for trait, environment important
    - 1. Example-genetic tendency to be overweight-but how much and kinds of food *important*

## **B.** Listening and Notetaking

Now that you've listened to the <b>lecture</b> once, listen again and take notes. The lecturer will present a slower-paced version of the lecture and will reiterate information so you will have time to take down the information in note form. You will be assisted in your notetaking by a notetaking mentor who will ask you to check that you wrote down important information. You may wish to review the outline before you begin your notetaking.
-

### $\Omega$ C. Listening to a Recounting of the Lecture

Listen to a student recount the lecture. The student will speak in a more informal, spontaneous style, paraphrasing and summarizing the information from the lecture. **As** you listen, check to be sure that your notes are complete.

### III. POSTLISTENING

### A. Recapping the Lecture from Your Notes: Presenting the Information Orally

Recount the information you heard in the lecture to a partner, the class, or your teacher. Use your notes to help you relate the main ideas as well as the supporting information that you heard in the lecture.

### B. Discussing Information and Issues Presented in the Lecture

In a group of two to four students, discuss the questions below. Your teacher may ask you to address one of the questions or all of them. During your discussion, use the information in your notes to support your ideas. At the end of the discussion, a representative from the group should summarize the group's discussion for the class.

- 1. Explain why people look different and behave differently even though they are from the same family, from the same city, or the same country. Use specific examples to support your explanation.
- 2. Discuss the **implications** for human-animal interaction of the lecturer's comment that humans and Bonobo apes share 97 percent of the same genes. Do you feel a kinship with apes and other animals of the world! Explain why or why not.
- 3. Trace the course of Mendel's career. Then list the qualities an excellent researcher such as Mendel must have. Explain why you believe these qualities are critical for an excellent researcher to have.
- 4. List several reasons why the garden pea was an excellent plant for Mendel to do his heredity experiments on.
- 5. How and why does the lecturer stress the idea that genes are not the sole determiner of a person's looks, personality, and behavior? Cite the example the lecturer used to support this idea.

### IV. READING EXPANSION

### A. Reading Encyclopedic Information

Suppose you wanted to get some information (additional to what is in your textbook] on the topic of heredity and genetic variation. One of the things you could do is look up the topic in an encyclopedia, either in the library or on the Internet. The selection that you are about to

read is from *The New Book of Knowledge*. Read the section from the encyclopedia to expand your knowledge about heredity. Before you read the article, answer the questions below.

- 1. What is the *first* thing you notice when you examine the text? Why?
- 2. What in the text itself attracts your eyes right away? Explain why?
- 3. Given what you learned about heredity and inherited traits in the lecture, what information appears new when you first peruse (examine) the text? Explain why.
- 4. What two subtopics are discussed under the general topic of heredity and variation.
- 5. Before you read the text, make a list of the new biology words you expect to know after reading the text. **Are** you interested in learning these words? Why or why not?
- 6. In this text, the writer describes some of the factors that result in heredity variation of traits. As you read, use a highlight pen (or underline) the definitions of the bold terms of the information you read.

### HEREDITY AND VARIATION

ents to their offspring.

Genes can be thought of as the basic units of heredity-the inheritance of traits from one generation to the next. Genes determine a variety of physical features, including your gender, height, and hair and eye colors. To find out how genes control such traits, geneticists study the patterns of variation, or change, in traits passed along from par-

When an individual exhibits a trail, geneticists say that the phenotype for that trait is expressed. Phenotypes are determined by combinations of different versions of a gene. Just as chromosomes come in pairs, so do most genes. These similar genes are called alleles. Alleles are located at the same site on each member of a chromosome pair and contain the genetic code for alternate forms of the same gene. The combination of alleles is called a genotype.

Genetic variation can happen when

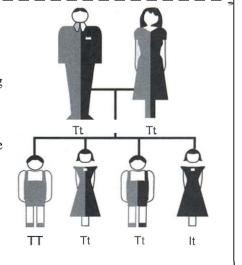
germ cells (sperm and eggs) are formed. In this process, called meiosis, cells will divide twice to produce four germ cells. During the first division, genes can be reshuffled between chromosomes. This reshuffling, or genetic recombination, varies the traits we see in individuals even within the same family.

#### **Dominant and Recessive Genes**

Despite this variety, many members of a family can have similar features. These traits are often examples of phenotypes that are said to be dominant. Other characteristics in a family may be seen in only some members. These traits are often examples of recessive phenotypes.

## INHERITANCE EXAMPLE '

Parents with both types, or alleles, of the tongue-rolling gene can produce children with lour possible combinations of alleles, or **geno**types. All three children carrying the dominant allele T can roll their tongues. Only the child with both copies of the recessive allelet is **unable** to do so.



For example, suppose two parents had both the dominant and recessive alleles for a certain trait-say, the ability to roll the tongue. Let us label the dominant allele (for the tongue-rolling ability) with a capital T, and the recessive allele (for no tongue-rolling ability) with a lowercase t. Each parent's

genotype, or combination of alleles, is Tt (see the diagram below). So, each child could have one of four possible **genotypes**, IT, Tt, IT (the same as Tt), or tt. Because T is dominant, both parents can roll their tongues, and any child with that allele Will be able to do so as well. Only a child with the genotype tt will lack the ability.

Family members with either the genotypes IT or tt are called homozygous. Members with the genotype Tt are called heterozygous. They are often referred to as carriers of the recessive allele---that is, they do not exhibit the recessive trait but they still carry the gene for it.

### **Gene Interactions**

Not all phenotypes are simply dominant or recessive. Geneticists believe that many traits involve

several genes that interact with one another in complex ways. These interacting genes, called polygenes, can produce a continuous variation in a trait that ranges from one extreme to another. In humans, characteristics such as height, weight, and skin color are all the result of polygenes.

Even some aspects of human intelligence and behavior appear to be influenced by multiple genes. For many years, scientists have debated whether intelligence and behavior are determined by genetics or shaped by how we are raised. Today, most scientists believe that genes, upbringing, and the interaction between the two are responsible.

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### B. Discussing Information and Issues Presented in the Reading

- 1. Explain briefly what genes are and what they do.
- 2. Explain the difference between the following: (1) phenotype versus genotype; (21 dominant versus recessive phenotype; (3) homozygous versus heterozygous genotypes. Give an example of each contrast.
- 3. Explain in your own words how alleles function.
- 4. Give an example of the working of a dominant allele versus a recessive allele. Use capital and small letters in your explanation.
- 5. In psychology, there is a continuing controversy over the importance of "nature versus nurture" in trying to explain, for example, why a criminal breaks the law. What information in the reading helps you respond to this controversy? Give an example to back up your response.
- 6. Match the terms in Column A with their equivalents in Column B.

Column A	Column B
1. allele(sl	a. interacting genes
2. dominant phenotype	b. process of germ cells (sperm and eggl dividing twice to produce four germ cells
3. 'IT or tt genotypes	c. trait in a family seen in only a few members
4. meiosis	d. homozygous family members
5. recessive phenotype	e. trait in a family seen in many members
6. genetic recombination	£. they come in pairs
7. polygenes	h. process of biological reshuffling

### **Journal Writing**

Respond to one of the following in your journal.

- 1. Describe the traits you received from your parents that serve you well, and the traits that cause you problems in life.
- 2. Think about your relatives-your uncles, aunts, cousins, and so forth. Identify the dominant land maybe recessive) traits that are common to a number of them.
- 3. Here are some examples of "dominant" and "recessive" traits in humans. Which traits would you like to have? Which would you not like to have? Explain why. List other physical characteristics you would like to have that could be inherited from your ancestors.

Dominant Traits	Recessive Traits
Brown eyes	Blue eyes
Rolling your tongue	Not being able to roll your tongue
Brown hair	Blond and red hair
Free ear lobes	Attached earlobes
Bent pinky	Straight pinky
Straight thumb	Curved thumb
Dimples	No dimples

### **Research Project**

Individually or in a group, research one of the following topics. Write a short paper on the topic, or plan and present a group presentation to inform the class about the topic.

1. Name the six additional traits of the pea plant besides flower color (white and violet) that Mendel studied and the two contrasting forms of each of the traits.

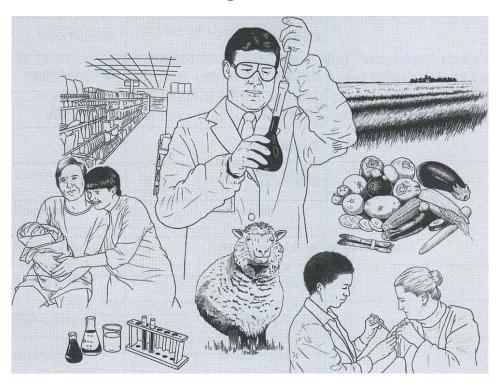
2. You can determine some of the genotypes and all of the phenotypes for human traits that are simple dominant or recessive traits. Research additional dominant and recessive traits to fill in the chart.

Dominant Trait	Recessive Trait
Cleft chin	No cleft chin
Hair above knuckles	Hairless fingers
Freckles	No freckles
Straight hair	Curly hair
Brown hair	Blond hair



# Genetic Engineering in the Biotech Century:

## Playing It Smart or Playing Roulette with Mother Nature's Designs?



## THINK ABOUT AND DISCUSS THE MEANINGS OF THE FOLLOWING QUOTATIONS:

Our doubts are traitors, And make us lose the good we oft might win By fearing to attempt.

-Measure for Measure: William Shakespeare (1564-1616)

English dramatist and poet

They are in you and in me; they created us, body and mind; and their preservation is the ultimate rationale for our existence... they go by the name of genes, and we are their survival machines.

-The Seliish. Gene: Richard Dawkins 11941-)

English zoologist

We've discovered the secret of life.

-Francis Crick 11916--)

English scientist

### A. Preview of the Content

All organisms, from the smallest virus to the largest elephant have genes. The complete collection of genes for each organism is called its genome. On earth, each species of living thing has its own unique genome. You might think of the genome as a giant cookbook with each gene being a single recipe. The recipes in the cookbook are passed down from generation to generation, like some family recipes are. The genes are "written" in a language called the genetic code. This code is based on a molecule shaped like a twisted ladder called DNA, or deoxyribonucleic acid. On February 28, 1953, two scientists, James Watson and Francis Crick, announced they had discovered the secret of life." What they had solved was one of biology's greatest mysteries: the structure of the DNA molecule. After Crick and Watson, other scientists learned howto remove and study the genes of simple organisms, such as bacteria. They then learned how to splice and cut the genes, and to "genetically engineer" new kinds of organisms. These biologists became "genetic engineers." Some people believe that gene splicing and the creation of new organisms via genetic engineering could be a great advantage for humankind, especially in the fields of agriculture and medicine; others fear that genetic engineering could be used to create new kinds of dangerous organisms, either by accident or on purpose. The debate about the pros and cons of genetic engineering continues. In today's lecture, you will hear some of the pros and cons of genetic engineering outlined. In addition, examples will be given to support the lecturer's points about the blessings and potential horrors of genetic engineering in the twenty-first century.

### B. Think about This

Think about the following questions.

- 1. Would you eat genetically engineered food? Give three reasons **why** or why not?
- 2. Do you expect to see cloning of animals and humans in the near future? Why or why not?
- 3. If given the chance, would you allow a commercial company to clone you or a loved one? Explain why or why not?
- 4. Think about 100 years in the future, what advances in medicine, agriculture, and transportation do you anticipate? Explain.
- 5. Have you seen the movie, or read the book *Frankenstein?* What implications (if any) does the "engineering" of Dr. Frankenstein's monster have for today's researchers in genetic engineering? Explain.

### **A**. Orientation Listening

As you listen to the lecture for the first time, use the outline below to help you understand the general content of the lecture and the topics discussed. The outline should help you perceive the overall structure of the lecture and the main ideas presented by the lecturer.

- I. Last session: two major issues
  - A. Mendel's experiments and findings about how traits are passed on
  - B. Role heredity plays: who we are, what we look like, how we behave
- n. Today's topic: genetic engineering (GEl
  - A. Potential advantages and disadvantages of GE
    - 1. Examples in agriculture and medicine
    - 2. Some cons of GE of new microorganisms
    - 3. How GE works
  - B. Rhetorical questions: Is it a good idea and a **benefit?** Is it **right?** 
    - 1. To grow orange/lemon plants from tissue. No need to plant orange/lemon orchards.
    - 2. To engineer "super animals"-food (extra nutrition and lower fat]
    - 3. To create transgenic animals to be chemical factories (drugs) and organ "donors."
- **m.** More controversial/personal questions
  - A. Should we use genetic screening to see **if** baby has hereditary disorder (for example, poor eyesight/mental depression/weight)?
  - B. Should we use genetic screening to see if baby has disease (for example, cancerjhemophilia)1
  - C. Many diseases are caused by agents (for example, virusesfbacteria); some are inherited (for example, cancers/cystic fibrosis)
    - 1. Hemophilia-disorder of blood-clotting factor-uncontrolled internal/external bleeding
      - a. Can control today-injections of blood-clotting factor
  - D. Genetic screening-babies are tested for hereditary diseases
    - 1. By 2004, in U.S. babies screened for many inherited diseases [for example, hemophilia, cystic fibrosis)
      - a. How long before we screen for characteristics (for example, physical strength/intelligence/eye color)
      - b. Should we leave screening and GE of humans/animals/plants to Mother Nature?

- IV. Genetic engineering of plants and animals already going on
  - **A.** Dolly the sheep cloned-1996
    - 1. Dolly demonstrated that clones can reproduce normally
  - B. Can clone sheep and mice
    - 1. Have scientists overstepped ethical boundaries?
- V. Genetic engineering in agriculture
  - **A.** By 2004, more than **fifty** crops genetically engineered (for example, potatoes, soybeans, corn]
  - B. How much farm acreage is devoted to GE or transgenic crop production?
    - 1. 68 percent (soybean), 26 percent (com), and 69 percent (cotton)
- VI. Good news [potential benefits) of genetic engineering
  - **A.** Can produce plants tolerant of drought and control speed of fruit ripening
  - B. Can produce crops resistant to chewing insects--no need to spray with pesticides
- Vn. Bad news about genetic engineering
  - A. Frightening story of *klebsiella planticola* IKPI microorganism (1990)
    - 1. A bacteria to get rid of crop residues
    - **2.** KP tested in careless and unscientific manner by scientists in biotech industry
    - 3. Biological monster that could kill all terrestrial plants, if released
- Vn. Key goals of GE in medicine/drugs
  - A. To make drugs to cure genetic disorders
  - B. To produce vaccines to protect against smallpox/malaria/new diseases

## $\mathbf{O}$ B. Listening and Notetaking

Now that you've listened to the lecture once, listen again and take notes. The lecturer will present a slower-paced version of the lecture and will reiterate information so you will have time to take down the information in note form. You will be assisted in your notetaking by a notetaking mentor who will ask you to check that you wrote down important information.				

### $\Omega$ C. Listening to a Recounting of the Lecture

Listen to a student recount the lecture. The student will speak in a more informal, spontaneous style, paraphrasing and summarizing the information from the lecture. As you listen, check to be sure that your notes are complete.

### **III. POSTLISTENING**

### A. Recapping the Lecture from Your Notes: Presenting the Information Orally

Recount the information you heard in the lecture to a partner, the class, or your teacher. Use your notes to help you relate the main ideas as well as the supporting information that you heard in the lecture.

### B. Discussing Information and Issues Presented in the Lecture

In a group of two to four students, discuss the questions below. Your teacher may ask you to address one of the questions or all of them. During your discussion, use the information in your notes to support your ideas. At the end of the discussion, a representative from the group should summarize the group's discussion for the class.

- 1. The lecturer began the main body of the lecture with a question. Explain the question and the implication of the first example of genetic engineering.
- 2. Explain what animal researchers are doing today in their field. What are the ethical issues involved in what they are doing? Are you in favor of using animals as organ donors for people?
- 3. How can expectant parents, who want to, use genetic screening and genetic engineering? What are the ethical problems parents may face as the twenty-first century unfolds, concerning screening and engineering?
- 4. Illustrate how one country is using medical screening for genetic disorders, and discuss the pros and cons associated with medical screening of newborns and embryos.
- 5. Describe how genetic engineering is being used in agriculture. Illustrate your response with specific examples from the lecture.
- 6. Give a specific example of the bad news about genetic engineering in agriculture. What caused the problem of the microorganism *klebsiella planticolai*
- 7. List the positive goals of pharmaceutical companies regarding genetic engineering.
- 8. Should we leave all genetic engineering to Mother Nature or should we trust aspects of genetic engineering to future biologists?

### A. Reading 1: Reading Encyclopedic Information

Once again, you will be reading a succinct informational entry from an encyclopedia. This entry is taken from the *The World Book Encyclopedia*. The reading covers two main topics. Answer these questions before you read.

- 1. What are the two main topics covered in the reading! How do you know this!
- 2. What do you know about these two topics! In laymen's terms, and as best you can, explain to a classmate what you know about the two topics and how you know it.
- 3. Before reading, discuss with a classmate what you know about the following topics:
  - a. genetic engineering
  - b. the genes of an organism
  - c. chromosomes
  - d. DNA and recombinant DNA
  - e. the double helix ladder
  - f. clone
- 4. What topic do you think would logically follow discussion of the two topics in the reading! Explain why you believe that.
- 5. As you read, use a highlighter to mark the meanings of the words [a through I] in the list above.
- 6. Now, read and study the article. You will discuss the information after you have read and studied the encyclopedia information that the lecturer did not have time to cover in the lecture.

### **▶** GENETICS

Genetic engineering is the term applied to scientific techniques that alter *genes* or *combinations of genes* in an organism. The cells of all living organisms contain genes. Genes carry the chemical information that determines the organism's characteristic or traits. By changing the organism's genes, you can give the organism and its descendents different traits.

For thousands of years, breeders of plants and animals have used breedingmethods to produce favorable combinations of genes. These "genetic engineers" have produced most of the economically important varieties of flowers, vegetables, grains, cows, horses, dogs, and cats. Beginning in the 1970s, scientists developed ways to reintroduce individual genes into cells or into plants, animals, or other organisms. Such techniques alter the heredity of the cells or organisms.

How genes are introduced into cells. Genes lie within cells on tiny, threadlike structures, called *chromosomes*. Each chromosome contains a single long molecule of a chemical substance called DNA or *deoxyribonucleic acid*. A molecule of DNA may contain thousands of genes. DNA stores within its chemical structure the information that determines an organism's hereditary properties.

The physical structure of all DNA is much the same in all organisms. The DNA molecule is shaped like a twisted rope ladder called a *double helix*. The "rungs" of the ladder are made of four chemical compounds called *bases*. A pair of bases forms each rung. Most genes consist of several thousand of these base *pairs*. The order of the bases, or the *base sequence*, provides the information necessary for a cell to make a specific protein. The form and function of a cell de-

pend on the protein it produces. **As** a result, the base sequence of an organism's DNA makes the organism different from all other living organisms or things.

In addition to storing information, the DNA molecule's structure allows for easy *replication* (duplication) of the molecule. Before a cell divides, enzymes split the DNA ladder lengthwise, separating the base pairs. Then, the base sequence in each half ladder directs the production of a new matching half. In this way, each of the two new ladders becomes a duplicate of the original ladder.

### See **Heredity** (Replication)

To alter the genetic makeup of DNA, scientists use a technique called *gene splicing*. In this technique, a gene-sized fragment of DNA is taken from one organism or from the same organism and the fragment is spliced to a DNA molecule from another organism. Gene-sized DNA fragments are isolated by means of *restriction enzymes*. These enzymes react chemically

with a specific base sequence in the DNA molecule and break the molecule at that point. The point where the DNA molecule breaks is called the *cleavage site*. The gene-sized DNA fragment can then be *spliced* (joined together) to another DNA molecule by using an enzyme called *ligase*. We call the hybrid molecule that is formed *recombinant DNA* 

When recombinant DNA is mixed with specially prepared cells, a few of the cells will take up the recombinant DNA in a process called *transformation*. The mixture of cells is then placed in a special culture medium that allows only the "transformed" cells to grow: Each of the transformed cells grows overnight into a colony of millions of cells. This colony represents a *clone*—that is, a group of genetically identical cells.

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### B. Discussing Information and Issues Presented in the Reading

- 1. Define what genetic engineering is, and what function it fulfills.
- 2. Describe how "genetic engineers" have been around for thousands of years. Why does the author make this statement?
- 3. Explain how and why genes are introduced into cells.
- 4. The structure of the DNA molecule stores information. What else does it do? Why?
- 5. Describe the process of altering the genetic makeup of DNA in your own words.
- 6. Why is a "special culture medium" used in the process of genetic engineering? What results from the allowing the transformed cells to grow in the "special culture medium.
- 7. Is the author's attitude toward genetic engineering positive, negative, or neutral? How can you **tell?** Explain.
- 8. What is the function of the phrase "See Heredity [Replication]" at the end of the fifth paragraph?

### C. Reading 2: Reading a Newspaper Article

The next selection is a newspaper article, written by a member of the Associated Press. Read the article and then answer the questions that follow.

## DNA may spawn a new generation of computers

By PAUL ELIAS, Associated Press

SAN FRANCISCO - It almost sounds too fantastic to be true, but a growing amount of research supports the idea that DNA, the basic building block of life, could also be the basis of a staggeringly powerful new generation of computers.

If it happens, the revolution someday might be traced to the night a decade ago when University of Southern California computer scientist Leonard Adleman lay in bed reading James Watson's text-book "Molecular Biology of the Gene."

"This is amazing stuff," he said to his wife, and then a foggy notion robbed him of his sleep: Human cells and computers process and store information in much the same way.

Computers store data in strings made up of the numbers 0 and 1. Living things store information with molecules represented the letters A, T, C and G.

There were many more intriguing similarities, Adleman realized as he hopped out of bed. He began sketching the basics of DNA computing.

Those late-night scribbles have long since given way to hard science, backed by research grants from NASA, the Pentagon and other federal agencies. Now a handful of researchers around the world are creating tiny biology-based computers, hoping to harness the powers of life itself.

### Transferred intelligenee

They call their creations "machines" and "devices." Really, they are nothing more than test tubes of DNA-laden water, and yet this liquid has been coaxed to crunch algorithms and spit out data.

The problems solved by DNA computers to date are rudimentary. Children could come up with the answers more quickly with a pencil and paper. But the researchers hope to someday inject tiny computers into humans to zap viruses, fix good cells gone bad and otherwise keep us healthy.

They're also pursuing the idea that genetic material can self-replicate and grow into processors so powerful that they can handle problems too complex for silicon-based computers to solve.

'A treasure chest'

Eventually, the scientists aim to create self-sustaining computers that can be used, for instance, on deep-space voyages, to monitor and maintain the health of humans on board.

What struck Adleman most that night he jumped out of bed was how a living enzyme "reads" DNA much the **same** way computer pioneer Alan Turing first contemplated in 1936 how a machine could read data.

"If you look inside the cell you find a bunch of amazing little tools," said Adleman, who made the first DNA-based computation in 1994. "The cell is a treasure chest."

Adleman used his computer to solve the classic "traveling salesman" mathematical problem - how a salesman can visit a given number of cities without passing through any city twice - by exploiting the predictability of how DNA interacts.

Adleman assigned each of seven cities a different strip of DNA, 20 molecules long, then dropped them into a stew of millions of more strips of DNA that naturally bonded with the "cities." That generated thousands of random paths, in much the sarne way that a computer can sift through random numbers to break a code.

From this hodgepodge of connected DNA, Adleman eventually extracted a satisfactory solution - a strand that led directly from the first city to the last, without retracing any steps. DNA computing was born.

#### Prone to error

What these researchers are essentially trying to do is control, predict and understand life itself, Biologists are only now grasping the basics of how and why DNA unzips, recombines and sends and receives information. DNA is notoriously fragile and prone to transcription errors - as the world's cancer rates prove.

These realizations and others have tempered initial expectations that DNA would ultimately replace silicon chips. Still, researchers in this field believe they remain on the vanguard of a computational revolution.

After all, a single gram of dried DNA, about the size of a half-inch sugar cube, can hold as much information as a trillion compact discs. Adleman senses that can be exploited somehow, some way. One problem is that setting up DNA computers and extracting results from them can take days or weeks. Perhaps a bigger obstacle is controlling biological developments to generate accurate calculations. DNA doesn't always behave like it's expected to.

Columbia University researcher Milan Strojanovic is developing a biology-based machine that doesn't need human help to compute.

Ehud Shapiro of Israel's Weizmann Institute of Science envisions programming molecules with medical information and injecting them into people. He received a U.S. patent in 2001 for a "computer" within a single droplet of water that uses DNA molecules and enzymes as input, output, software and hardware.

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### D. Discussing Information and Issues Presented in the Reading

- 1. What fueled Leonard Adleman's belief that human cells and computers process and store information in "much the same way"?
- 2. Describe the similarities and differences in the ways computers and humans store information.
- 3. Describe the biology-based computers that are being created by scientists and explain the following: (II what they can do in the year 2003; and (21 what scientists hope they will be able to do in the future. Give examples to support each of your responses.
- 4. What classic problem did Adleman use his DNA computer to solve? Explain the solution of the problem.
- 5. What realization has "tempered initial expectations that DNA would ultimately replace silicon chips"? What does this realization have to do with computer chips?
- 6. The use of DNA computation may have implications for what field? Provide an example.

### **Journal Writing**

Respond to one of the following in your journal.

- 1. Genetic engineering is a test tube science and is prematurely applied in food production. Agree or disagree and explain why you feel this way.
- 2. Jeremy Rifkin, author of *The Biotech Century*, claims that our way of life is likely to be more fundamentally transformed in the next several decades than in the previous one thousand years. What is your sense of the accuracy or inaccuracy of Rifkin's claim?
- 3. Animal and human cloning could become commonplace in the coming decades, with "replication" partially replacing "reproduction" for the first time in history. What will be the ramifications

- for people, or for animals, if, indeed, replication replaces reproduction? Are you in favor of (or against) the idea?
- 4. Some couples (young and old) might choose, in the future, to have their children conceived in test tubes and gestated in artificial wombs to ensure a safe and transparent environment through which to monitor their unborn child's development. Is this a good idea or **not? Why?**
- 5. For those who believe technology has made our life worse, James Martin, author of *The Wired Society* (published in 1977), comments, "We have now put ourselves in a position where, **if** we wanted to return to nature, nature could feed only about 500 million people on Earth. Without technology, we could not feed the 6 billion we are feeding now [in **1977**], much less than the 9 billion who will be living on this planet by 2050." Will technology be needed to help feed the people of Earth almost 50 years from **now?** Explain why or why not.

### Research Project

Individually or in a group, research one of the following topics. Write a short paper on the topic, or plan and present a group presentation to inform the class about the topic.

- 1. One drop of blood has enough DNA to use gene technology to determine a person's DNA profile. Thanks to gene technology, many criminal cases have been solved and many paternity disputes have been settled. Research this topic further on the Internet or in a biology textbook to find out how criminal cases or paternity suits can be settled with genetic testing of an ounce of blood.
- 2. Research the types of food available that are commonly genetically engineered. List the foods that are eaten by the general public. Ask people in your cominunity if they are aware that these foods are genetically engineered.

### INFORMATION RECALL TEST

**Unit Five** 

Biology: Understanding Genetics to Genetic Engineering

Part One: Short-Answer Questions

Answer each question by referring to the notes you took while listening to the lectures in this unit.

Chapter9

The Origins of Genetics: Mendel and the Garden Pea

- 1. What is the function of genes in people and animals?
- 2. Where are genes found in the body and how are they transmitted through the generations?
- 3. Provide at least three examples of inherited traits.
- 4. Provide an example to support the idea that "humans share many of the same genes with other kinds of animals."
- 5. Define the terms *genetics* and *geneticists*.
- 6. Specify the following:
  - a. the dates of Mendel's life
  - b. the dates Mendel experimented and kept record on 28,000 pea plants

7. To what were the Mendelian Laws of Heredity related. 8. Explain when Mendel studied mathematics at the University of Vienna, and why he did not complete his studies. 9. Explain why the lecturer used the example of racehorses in the lecture, and name the racehorses mentioned by the lecturer. 10. The lecturer mentioned another early pioneer in the study of heredity and genetics whose work Mendel decided to repeat. Who was this pioneer and what did he do? 11. Explain why Mendel used a plant rather than an animal on which to do his heredity experiments. 12. Explain what was so amazing about Mendel's record keeping of his work on the 28,000 plants. Genetic Engineering in the Biotech Century: Playing It Smart or Playing Roulette Chapter 10 with Mother Nature's Designs7 1. How did the lecturer distinguish between what he talked about in the previous lecture? In other words, how did he establish the continuity of the topic of the second lecture with the first?

2. State the topics about genetic engineering the lecturer dealt with

in lecture 2.

3.	Define the following terms:  a. Vesicles  b. Super animals  c. Transgenic animals  d. Animal organ donors
4.	Name a number of diseases that are thought to be inherited from parents, relatives, or long-ago ancestors.
5.	State what hospitals are requiring for newborn babies in the United States after the year 2004.
6.	The famous Dolly has sparked a controversy in science and ethics. What is that controversy?
7.	Indicate the two main purposes for which biologists are using genetic engineering.
8.	Provide an example of (1) the potential benefits, and (2) the potential dangers of the genetic engineering of crops.
9.	How is genetic engineering being used by pharmaceutical companies around the world?

### Part Two: Essay Questions

Answer each essay question below in a paragraph. Use the notes you took on the lectures to support the claims you make in your essay.

- 1. Explain at least three functions of genes in people, animals, insects, and plants, and describe an experiment that could be carried out [other than the one done by Mendel) to study how a trait or characteristic is passed from one generation to another. Be creative, if not totally scientific, in your description.
- **2.** Make some assumptions about Gregor Mendel's personality and intelligence based on his time at the University of Vienna, and his studies of the pea plant.
- 3. Explain why people are interested in "breeding" insects, plants, animals, and even humans. Give specific examples of why people would want to know how to control each of these species.
- 4. Explain how Mendel built on the work of the genetics pioneer named Knight. Think of another early pioneer of medicine, biology, chemistry, ecology (or another field] whose work laid the foundation of discoveries in science that contributed to the advance of science or technology. Name the person and describe his or her contribution to science or technology.
- 5. Agree or disagree with the statement: Humans should continue to seek ways to selectively breed insects, plants, and animals, and people for the betterment of humankind. Give specific reasons for or against this notion.

- 6. Synthesize the controversial issues (both general and personal) involving the use of genetic engineering in medicine and agriculture.
- 7. Explain (1) the purpose of the genetically engineering microorganism *klebsiella planticola*, (2) the danger the microorganism posed, and (3) the way in which the danger of *klebsiella planticola* was reduced.
- 8. Agree or disagree with the statement "I am in favor of pursuing research and development of genetic engineering in agriculture and/or medicine." Support your opinion with statements used by the lecturer, as well as other factual or personal-opinion statements. Be sure to indicate the following: (11 statements (or paraphrases) the lecturer used; (2) additional factual examples; and (3) your own personal-opinion examples.

### Part Three: Constructing Test Questions

Use the notes you took on the lecture in Unit Five to write three test questions about each lecture. After you write the questions, ask a classmate to use his or her notes to answer the questions.



**Appendix** A: Audioscripts 132

Appendix B: Answer Keys 205

### **APPENDIX A:** AUDIOSCRIPTS

**Unit One** 

Anthropology:
The Evolution of Human Endeavor

Anthropology: The Study of Human Beings and Their Creations Chapter 1

## **A**. Orientation Listening Script

The Greek word for "man" is "anthropos" and the word anthropology has been in the English language for centuries. But just what does the word mean? Literally anthropology means "the study of man." However, as British philosopher **Alfred** North Whitehead noted, "It is a wellfounded historical generalization that the last thing to be discovered in any science is what the science is really about." And as Paul Bohannan, renowned anthropologist, pointed out a number of years ago, "Each science that deals with people has its own definitions of human. An Economist," he explains, "defines a human as a choice-making animal. Philosophers define man as a rationalizing animal. ... "Anthropology attempts to be all-inclusive-the study of human behavior in all places and throughout time. It specializes in the description of humanistic, scientific, biological, historical, psychological, and social views of humans.

To paraphrase Barbara Miller's statement in her textbook, Cultural Anthropology, the popular impression of anthropology is basedmainly on movies and television shows that depict anthropologists as adventurers and heroes. Some do have adventures and discover treasures in Egyptian tombs and elsewhere, but mostly, their work is less glamorous and involves repetitive and tedious activities. Until around the middle of the nineteenth century, anthropology was a term used for all humanists. My lecture today explains the fields and branches of anthropology. We're going to begin by stating that anthropology is the study of human behavior in all places and at all times.

Western civilization takes credit for the development of anthropology, which, as a matter of fact, was a relatively late science. Earlier Greek and Roman philosophers were more interested in speculating about the ideal society rather than describing those known to them.

After the onset of the Age of Exploration, which included the discovery of the Americas, as well as travel to other distant places, the study of non-Western people began in earnest. In modern day, anthropology is a recognized social science with two broad fields and several branches or subfields.

The two broad fields are physical anthropology and cultural anthropology. Let me give you a brief description of each. Physical anthropology is concerned with the development of man as a mammal. Related subjects are anatomy, biology, and paleontology. Physical anthropologists study the evolution of the human species. One way they do this is by the comparative analysis of fossils-preserved remnants

of oncelliving creatures and living primates, which include human beings or *Homo sapiens*. Common fossils are shells, bones, and molds or imprints. These are found buried in the earth or permanently frozen in glaciers. Living primates are analyzed in order to study the mechanics of evolution and genetic differences among human populations.

Next let's talk about cultural anthropology. This field is the study of learned behavior in human societies. Most cultural anthropologists limit themselves to a few geographic areas, for example, Margaret Mead in Samoa and New Guinea, and Clyde Kluckhohn with the Navajo Indians in the Southwestern United States. I should mention that Kluckbohn's work *Mirror* for Man is considered one of the best introductions to anthropology. Cultural anthropology and the scientific study of human culture will be discussed in more detail in our next lecture. The subfields of cultural anthropology are archaeology, linguistics, and ethnography.

Archaeology is the study of different cultures through material sources rather than direct interviews or observations of the group under study. One example of a famous archaeological site discovered in the past century was King Tut's Tomb near Luxor, Egypt, in 1922.

Linguistics, as you probably know, is the study of language as communication among humans. Culture is learned and transmitted primarily through language.

Ethnography is the systematic description of human societies, mostly based on firsthand fieldwork. Based on ethnographies, anthropologists provide ethnologies or explanations of the behavior of different peoples. A second subfield of ethnography is social anthropology. Social anthropology is concerned with people as social beings. A related subject is, of course, sociology.

Let me also mention briefly psychological anthropology, which deals with human personality and feelings. These are greatly influenced by an individual's biological and mental characteristics, as well as physical surroundings and personal experiences. Related subjects are psychology and psychiatry.

It is important to note that there are several universals common among all societies; for example, the basic similarities in human biology and the existence of two sexes. Another of these is education-either formal or informal or both. Education is necessary to provide the young with the skills and attitudes needed to carry on as adults.

So, you might ask, what are the practical applications for such a broad field? The answer is that anthropology helps us plan the future and helps us contribute to the solution of human problems. This newest area of the study of man is applied anthropology. Formerly, anthropology was limited to the academic field. Anthropologists were teachers or museum curators. But for the past several decades large numbers of "anthro" graduates have been employed in fields such as urban planning and administration, health care, and international development. Most important is that although anthropologists have taken up the task of documenting the processes and changes of cultures past and present, they also provide the necessary insights into where the human species is heading.

### Chapter 1 Anthropology: The Study of Human Beings and Their Creations

## R. Listening and Notetaking Script

The Greek word for "man" is "anthropos" and the word anthropology has been in the English language for centuries. But just what does the word mean? Literally anthropology means "the study of man." However, as British philosopher Alfred North Whitehead noted, "It is a well-founded historical generalization that the last thing to be discovered in any science is what the science is really about." And as Paul Bohannan, renowned anthropologist, pointed out a number of years ago, "Each science that deals with people has its own definitions of human. An Economist," he explains, "defines a human as a choice-making animal. Philosophers define man as a rationalizing animal. . . . "Anthropology attempts to be all-inclusive-the study of human behavior in all places and throughout time. Itspecializes in the description of humanistic, scientific, biological, historical, psychological, and social views of humans.

Let's review some of the information you just heard to **help** you with your notetaking. Check your notes and fill in any information you didn't have time to take down the first time you heard it. If you didn't get a chance to write down all that you wanted to write down, did you at least make some notations so that you could review the notes later and complete the missing information. Let's see. The lecturer began with the Greek word for man. Did you get the **spelling** of anthropos! It's a-n-t-b-t-o-p-o-s. So what is the **meaning** of anthropology! Literally, it is the study of man. What was the name of the British philosopher! Did you get his full name! Alfred North Whitehead. What was **his** message about science! He said the last thing to be discovered in any science is what it is really about. Is Paul Bohannan a physical or social anthropologist! You're correct if you wrote social. Now let's return to the lecture.

To paraphrase Barbara Miller's statement in her textbook, *Cultural Anthropology*, the popular impression of anthropology is based mainly on movies and television shows that depict anthropologists as adventurers and heroes. Some do have adventures and discover treasures in Egyptian tombs and elsewhere, but mostly, their work is less glamorous and involves repetitive and tedious activities. Until around the middle of the nineteenth century, *anthropology* was a term used for all humanists. My lecture today explains the fields and branches of anthropology. We're going to begin by stating that anthropology is the study of human behavior in all places and at all times.

Western civilization takes credit for the development of anthropology, which, as a matter of fact, was a relatively late science. Earlier Greek and Roman philosophers were more interested in speculating about the ideal society rather than describing those known to them.

What year did Barbara Miller publish Cultural Anthropology? Was it 1899 or 1999! According to her, what is the impression of anthropology based on! How are anthropologists depicted! Prior to

the 1850s what was the term "anthropology" used for! What is the lecturer's definition! Who takes credit for the development of anthropology! What were the ancient philosophers interested in! Is this information in your notes! Now let's continue.

After the onset of the Age of Exploration, which included the discovery of the Americas, as well as travel to other distant places, the study of non-Western people began in earnest. In modern day, anthropology is a recognized social science with two broad fields and several branches or subfields.

The two broad fields are physical anthropology and cultural anthropology. Let me give you a brief description of each. Physical anthropology is concerned the development of man as a mammal. Related subjects are anatomy, biology, and paleontology. Physical anthropologists study the evolution of the human species. One way they do this is by the comparative analysis of fossils-preserved remnants of once-living creatures and living primates, which include human beings or Homo *sapiens*. Common fossils are shells, bones, and molds or imprints. These arc found buried in the earth or permanently frozen in glaciers. Living primates are analyzed in order to study the mechanics of evolution and genetic differences among human populations.

What was **the** period of travel and discovery of new places called! Did you write down **the** phrase: the Age of Exploration! Do you have **the** descriptions of **the** two main branches of anthropology! What are **the** related subjects of physical anthropology! What are fossils! Did you take down **three** kinds **that** were mentioned! What was **another** word for molds! Where are fossils found! Check your notes.

Next let's talk about cultural anthropology. This field is the study of learned behavior in human societies. Most cultural anthropologists limit themselves to a few geographic areas, for example, Margaret Mead in Samoa and New Guinea, and Clyde Kluckhohn with the Navajo Indians in the Southwestern United States. I should mention that Kluckhohn's work Mirror *for Man* is considered one of the best introductions to anthropology. Cultural anthropology and the scientific study of human culture will be discussed in more detail in our next lecture. The subfields of cultural anthropology are archaeology, linguistics, and ethnography.

Archaeology is the study of different cultures through material sources rather than direct interviews or observations of the group under study. One example of a famous archaeological site discovered in the past century was King Tut's Tomb near Luxor, Egypt, in 1922.

Linguistics, as you probably know, is the study of language as communication among humans. Culture is learned and transmitted primarily through language.

Ethnography is the systematic description of human societies, mostly based on firsthand fieldwork. Based on ethnographies, anthropologists provide ethnologies or explanations of the behavior of different peoples. A second subfield of ethnography is social anthropology. Social anthropology is concerned with people as social beings. A related subject is, of course, sociology.

Let me also mention briefly psychological anthropology, which deals with human personality and feelings. These are greatly influenced by an individual's biological and mental characteristics, as well as physical surroundings and personal experiences. Related subjects are psychology and psychiatry.

There were a lot of details in this part of the lecture. Let's back-track a bit. Let me spell the last names of the two anthropologists just mentioned. Margaret Mead-that's M-e-a-d-and Clyde Kluckhohn-K-l-u-c-k-h-o-h-n. Did you write down the three subfields of cultural anthropology that the speaker mentioned! They were archaeology, linguistics, and ethnography. To save time, you can check the spelling later. Note the mention of psychological anthropology. What is it concerned with! What are the related subjects! Now let's see what the speaker talks about next.

It is important to note that **there** are several universals common among all societies, for example, the basic similarities in human biology and the existence of two sexes. Another of these is education-either formal or informal or both. Education is necessary to provide the young with the skills and attitudes needed to carry on as adults.

So, you might ask, what are the practical applications for such a broad field? The answer is that anthropology helps us plan the future and helps us contribute to the solution of human problems. This newest area of the study of man is applied anthropology. Formerly, anthropology was limited to the academic field. Anthropologists were teachers or museum curators. But for the past several decades large numbers of "anthro" graduates have been employed in fields such as urban planning and administration, health care, and international development. Most important is that although anthropologists have taken up the task of documenting the processes and changes of cultures past and present, they also provide the necessary insights into where the human species is heading.

What were the universals mentioned! What are the practical applications of the field! Where did we mostly find cultural anthropologists in the past! Did you take down all the job areas mentioned! What were they! Right-urban planning, health care, and international development. Finally, according to the lecturer, what valuable insight does the anthropologist provide!

# Unit One Anthropology: The Evolution of Human Endeavor

## Chapter 2 The Concept of Culture: Understanding One Another

# **\( \Operatorname{A}\)** A. Orientation Listening Script

Let me begin the lecture today by asking, "What exactly is culture?" This question has been approached by anthropologists in many different ways. Murdock, for example, in *Outline of World Cultures*,

produced what many have called the ultimate laundry list of things cultural by naming 900-odd categories of human behavior. I won't attempt to go into these at this time. Another less lengthy list is the famous "grocery list" of Edward B. **Tyler.** He wrote, "Culture is that complex whole which includes knowledge, belief, art, morals, custom, and any other capabilities and habits acquired by man as a member of society." But another definition of culture that many find useful is, "the totality of learned, socially transmitted behavior." Obviously this definition leaves out much if we feel obligated to include all the ways of life that have been evolved by people in every society.

A particular culture, then, would mean the total shared way of life of a given group. This would include their ways of thinking, acting, and feeling as reflected in their religion, iaw, language, art, and customs, as well as concrete things such as houses, clothing, and tools. Cultural anthropology is the study of cultures-living and dead. In its totality, it includes linguistics, the study of speech forms, archaeology (the study of dead cultures), and ethnology, which is the study of living cultures or those that can be observed directly.

Why study cultural anthropology? One reason noted by Ruth Benedict, another well-known anthropologist, is that the story of humanity from the Stone Age to the present is such a fascinating one of cultural growth. Interestingly, every society has gone through three stages or steps of cultural growth. These are savagery, barbarism, and finally, civilization. The last is, of course, to varying degrees.

We are often reminded of another compelling reason to learn about different cultures-to learn and use a foreign language effectively. Most of us realize that just knowing the language of another culture is not enough for meaningful communication. You can ask anyone who has tried to use their high school Spanish inside a Spanish-speaking country.

Ned Seelye, in his 1993 book *Teaching Culture*, lists six skills to nurture and support intercultural communication:

Number 1: Cultivate curiosity about another culture and empathy toward its members.

Number 2: Recognize that different roles and other social variables such as age, sex, social class, religion, ethnicity, and place of residence affect the way people speak and behave.

Number 3: Realize that effective communication requires discovering the culturally conditioned images of people when they think, act, and react to the world around them.

Number 4: Recognize that situational variables and conventions shape people's behavior in important ways.

Number 5: Understand that people generally act the way they do because they are exercising the options their society allows for satisfying basic physical and psychological needs.

And, finally, number 6: Develop the ability to evaluate the truth of a generalization about the target culture and to locate and organize

information about the target culture from books, mass media, people, and personal observations.

Culture and society must coexist. Without living together people cannot create a culture or way of life. If a group or society is small, isolated, and stable, it might also share a single culture. For example, think of the Tasaday, allegedly a Stone Age people in the Philippine rain forest, who were discovered by anthropologists back in 1971. A side note is that due to their supposed isolation, they had no weapons or known words in their language for "enemy" or "war." In your reading after the lecture, you'll learn more about the Tasaday and the controversy surrounding them up to the present time.

It is important to remember, however, that large societies, such as those in Canada, the United States, India, or Egypt, are multicultural or "pluralist" societies. They also tend to have many subcultures. In the long history of human life, multiculturalism is a fairly recent phenomenon. Those of us in multicultural environments must remember that discovering similarities among people from different cultures is as important as identifying differences. For example, in classrooms on just about every university campus in the world, we find students from many different social and ethnic backgrounds. What are some of the "universals" that you and other international students have all experienced in your earlier educational life?

One common universal is that all cultures use rewards and punishments to encourage correct behavior. Another example is that societies withhold certain information from the young. This might include faults in our leaders or sexual taboos. A third universal is the effort by the controlling group in a culture to educate the young to strengthen and secure its dominant position. In the majority of contemporary societies this control is reached through political means in contrast to the military actions of earlier times, such as the Roman Conquests and the Moorish invasions.

In closing this lecture on societies and culture, let me remind you not to forget the contributions of thoughts and actions of the individual person in a group. Note the observation of Edward Sapir, another famous anthropologist: "It is always the individual that really thinks and acts and dreams and revolts." Obviously the concept of culture will be argued by anthropologists for years to come.

## Chapter 2 The Concept of Culture: Understanding One Another

# $oldsymbol{\Omega}$ B. Listening and Notetaking Script

Let me begin the lecture today by asking, "What exactly is culture?" This question has been approached by anthropologists in many different ways. Murdock, for example, in *Outline of World Cultures*. produced what many have called the ultimate laundry list of things cultural by naming 900-odd categories of human behavior. I won't attempt to go into these at this time. But another less lengthy list is

the **famous** "groccry list" of Edward B. Tyler. He wrote, "Culture is that complex whole which includes knowledge, belief, art, morals, custom, and any other capabilities and habits acquired by man as a member of society." Another definition of culture that many find useful is, lithe totality of learned, socially transmitted behavior." Obviously this definition leaves out much if we feel obligated to include all the ways of life that have been evolved by people in every society.

The lecturer has given us a lot of information and a lot to think about in these opening lines. How many categories did George P. Murdock name in his book? Did you get the name of the book? It was Outline of World Cultures. What did she call Tyler's definition of culture?

A particular culture, then, would mean the total shared way of life of a given group. This would include their ways of thinking, acting, and feeling as reflected in their religion, law, language, art, and customs, as well as concrete things such as houses, clothing, and tools. Cultural anthropology is the study of cultures-living and dead. In its totality, it includes linguistics, the study of speech forms, archaeology (the study of dead cultures), and ethnology, which is the study of living cultures or those than can be observed directly.

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We are often reminded of another compelling reason to learn about different cultures-to learn and use a foreign language effectively. Most of us realize that just knowing the language of another culture is not enough for meaningful communication. You can ask anyone who has tried to use their high school Spanish inside a Spanish-speaking country.

Did you **get** the three steps of cultural growth or **development**? They are savagery, barbarism, and civilization. Savagery is a form of primitive behavior; barbarism **refers** to an uncivilized condition. To **the** Greeks and Romans, it was a term for foreigners. Civilization is social organization with government and cultural complexity. The learning of a foreign language was mentioned next. Did you iot down the phrase, "meaningful communication"?

Ned Seelye, in his 1993 book *Teaching Culture*, lists six skills to nurture and support intercultural communication:

Number 1: Cultivate curiosity about another culture and empathy toward its members.

Remember to use abbreviations to keep up with the lecturer. For example culture can be shortened to cult. That's c-u-l-t period. As the lecture continues you should **get** better at developing your own system. It's important, however, that you have no problem understanding your abbreviations.

Number 2: Recognize that different roles and other social variables such as age, sex, social class, religion, ethnicity, and place of residence affect the way people speak and behave.

Number 3: Realize that effective communication requires discovering the culturally conditioned images of people when they think, act, and react to the world around them.

Number 4: Recognize that situational variables and conventions shape people's behavior in important ways.

Number 5: Understand that people generally act the way they do because they are exercising the options their society allows for satisfying basic physical and psychological needs.

And, finally, number 6: Develop the ability to evaluate the truth of a generalization about the target culture and to locate and organize information about the target culture from books, mass media, people, and personal observations.

In writing down the six points in your notes did you use abbreviations and omit many of the unnecessary structure words such as the articles the, a or an? In the first rule did you write down the key words: curiosity, empathy, other cultures. Let me summarize the others:

Rule 2: Recognize different roles and behavior determined by sex, age, social class, religion, ethnicity, place of residence.

Rule 3: Effective communication requires knowing how to recognize how and why people think, act, and react to the world around them.

Rule 4: Situation variables and conventions or customs shape people's behaviotin important ways.

Rule 5: People in different societies act they way they do because of the options their society offers them.

And Rule 6: We must learn to get at the truth about the target culture we are trying to understand. Books, mass media, people, and personal observation are all used in this process.

Let's continue with the lecture.

Culture and society must coexist. Without living together people cannot create a culture or way of life. If a group or society is small, isolated, and stable, it might also share a single culture. For example, think of the Tasaday, allegedly a Stone Age people in the Philippine rain forest, who were discovered by anthropologists back in 1971. A side note is that due to their supposed isolation, they had no weapons or known words in their language for "enemy" or "war." In your reading after the lecture, you'll learn more about the Tasaday and the controversy surrounding them up to the present time.

What did the lecturer say is necessary for a group or society to have one culture! She mentioned they must be small, isolated, and stable. In what year were the Tasaday people discovered in the Philippines! Right, it was in 1971. The lecturer said they had no weapons or words for enemy or war. Let's be sure to spell Tasaday correctly: It's 'I-a-s-a-d-a-y. Let's hear more of the lecture.

It is important to remember, however, that large societies such as those in Canada, the United States, India, or Egypt, are multicultural or "pluralist" societies. They also tend to have many subcultures. In the long history of human life, multiculturalism is a fairly recent phenomenon. Those of us in multicultural environments must remember that discovering similarities among people from different cultures is as important as identifying differences. For example, in classrooms on just about every university campus in the world, we find students from many different social and ethnic backgrounds. What are some of the "universals" that you and other international students have all experienced in your earlier educational life?

One common universal is that all cultures use rewards and punishments to encourage correct behavior. Another example is that societies withhold certain information from the young. This might include faults in our leaders or sexual taboos. A third universal is the effort by the controlling group in a culture to educate the young to strengthen and secure its dominant position. In the majority of contemporary societies this control is reached through political means in contrast to the military actions of earlier times, such as the Roman Conquests and the Moorish invasions.

The last topic was multicultural or pluralistic societies. There were several countries given as examples. Did you write them down! They were Canada, the United States, India, and Egypt.

Did you abbreviate the names! But after mentioning multiculturalism the lecturer discussed universals-in other words, things that are common to different people all over the world. What were the three examples! First, she said we all use rewards and punishments to encourage correct behavior. The second universal was that we hold back certain information from our young people. Let's repeat the examples. They include weaknesses or faults in our political leaders and sexual taboos. The **third** was that the people in power or in control use education to strengthen and secure their own security and position. Now let's hear the rest of the lecture.

In closing this lecture on societies and culture, let me remind you not to forget the contributions of thoughts and actions of the individual person in a group. Note the observation of Edward Sapir, another famous anthropologist: "It is always the individual that really thinks and acts and dreams and revolts." Obviously the concept of culture will be argued by anthropologists for years to come.

Let me repeat the words of Edward Sapii-i-that's S-a-p-i-r: He said, "It is always the individual that really thinks and acts and

**dreams** and revolts." Did you write down individual-s-tbinks, acts, **dreams**, revolts! Do you understand what anthropologists (Did you abbreviate **this** wotdl} Will continue to argue about!

Unit Two History:

The Passing of Time and Civilizations

Chapter 3 The Egyptian Pyramids: Houses of Eternity

**A**. Orientation Listening Script

To many people throughout the world, some of the most remarkable and puzzling monuments of ancient **times** are the pyramids of ancient Egypt. You know, almost nothing at all remains of the great cities of the kings of Egypt, the pharaohs. Time and weather have been really hard on ancient **Egypt's** cities and towns, but several of the temples, statues, and, most important of all, the pyramids have survived. Even though many of the pyramids are in ruins, they still give us some idea of the magnificence of ancient Egypt's civilization-a civilization that, after all, lasted for more than 3,000 years. Remember, when we're talking about ancient Egypt, we're talking about at least thirty consecutive dynasties. A dynasty is a series of kings or queens of the same royal family-something like the Romanovs of Europe, the Ming dynasty of China, or the Al-Sauds of Saudi Arabia.

As many of you probably already know, the pyramids were constructed as tombs or burial places for the Egyptian kings and their family members. You see, the ancient Egyptians passionately believed in life after death. In fact, their entire culture revolved around that belief. The kings, queens, and state officials often spent an entire lifetime preparing for their life after death. They did this by collecting possessions or "grave goods," by building tombs, and so forth. The Egyptians believed that they could be assured of an afterlife only if their bodies could be preserved from decay or destruction. So when a person died, and especially when a pharaoh died, in order to ensure his etemallife, he had his body embalmed or mummified. In other words, he had his corpse dried out and wrapped in linen to preserve it from decay. Then he had his mummy hidden. This whole idea may seem quite strange today, but the ancient Egyptians really believed that if one's mummy was destroyed, then his or her soul would be destroyed, and if, on the other hand, the mummy-the dead body-was preserved, the soul would be immortal. Let me repeat that. If one's mummy was preserved, the soul would go on living.

For another thing, the ancient Egyptians believed that the dead person could take his or her earthly possessions along to the next world-this is just the opposite of the Western idea that "you can't take it with you when you go." Anyway, the dead person was provided with food, clothing, furniture, weapons, and even servants. It was not at all

unusual for the pharaoh's slaves to be put to death so that they could serve him in his afterlife.

So you can see why the pharaohs wanted to have their bodies and their possessions hidden to protect them from grave robbers. Before they died, they had special tombs built for this purpose-to hide their bodies and their treasures. In the early years of ancient Egypt, these tombs were the pyramids-the vast burial chambers that were built to fool the grave robbers. Unfortunately, the grave robbers almost always outsmarted even the most powerful and the most careful of pharaohs. They broke into most of the pyramids or tombs and stole the food and other treasures they found. They even desecrated and destroyed the mummies of the dead. Needless to say, they would not bother a *poor* person's grave. These grave robbers even banded together into organizations or brotherhoods. Just imagine, 'a grave robbers' union!

Now, as for the actual construction of the mighty pyramids, it was during the First and Second Dynasties that the kings and nobles of Egypt began to construct the type of tomb called the "mastaba." The First and Second Dynasties lasted from about 3100 until 2665 B.C.E. Mastaba, by the way, comes from an Arabic word meaning "bench" or "long seat." A mastaba looked like a low, flat-topped rectangle-something like a low bench or a shoebox. Essentially, the pointed pyramid was no more than an extension upward of the flat-topped mastaba.

The first "typical" pyramid (or, at least what most people generally think a pyramid looks like) was built during the Third Dynasty (which lasted roughly from about 2664 until 2615 B.C.E.) This pyramid was for King Zoser (that's spelled Z-o-s-c-r) in about 2650 B.C.E. It was built by an architect named Imhotep [I-m-h-o-t-e-p]. This pyramid was constructed as a series of giant steps or stairs. It, along with others of its type, is called the Step Pyramid. It was really simply a pile of mastabas, each step smaller and higher than the one before. The Step Pyramid of King Zoser was different from the later pyramids because it was never covered with stone to give it a smooth surface.

Actually, it was not until the Fourth Dynasty that the most famous pyramids were built. The three great pyramids of Giza belong to the Fourth Dynasty pyramids. {The Fourth Dynasty covered the period from 2614 to 2502 B.C.E.1 They are located near the town of Giza, on the west bank of the Nile River, just outside the capital city of Egypt-Cairo. The Great Pyramids are really the very best preserved of all the Egyptian pyramids. The largest of these pyramids is known as the Great Pyramid. And great it is! It was built for King Khufu (that's K-h-u-f-u], (Khufu was called Cheops [Cvh-e-o-p-s] by the Greeks, and so the pyramid is sometimes called the pyramid of Cheops.) It has been estimated that 2.3 million blocks of limestone were used to build the Great Pyramid. The blocks averaged 2,500 kilograms each. The largest stone block weighs about 15,000 kilos. The base of the pyramid covers 5.3 hectares-an area large enough to hold ten football fields. There's a story that the conqueror Napoleon once sat in the shadow of the Great

Pyramid and calculated that the mass of stone in the pyramid could be used to build a wall three meters high by 0.3 meters thick around the entire country of France. In terms of height, the pyramid was originally 147 meters high, but today the top 10 meters are missing, and the entire outer limestone covering has been stripped away. It seems that local builders and conquerors found it convenient to strip off the limestone from the pyramids and use it to build with.

The Great Pyramid of Khufu is considered a wonder of ancient architecture. When you look at it, you immediately wonder how on earth the ancient Egyptians ever managed to build such a structure with only basic mathematics, with no modem machinery (such as cranes, bulldozers, and so forth), and with no iron tools. They had to cut the big limestone blocks with tools made of copper, which is a rather soft metal. But they managed to do it. The ancient-Greek historian, Herodotus (that's H-e-r-o-d-o-t-u-sl-Herodotus said that 400,000 men worked for twenty years to build the Great Pyramid. Archaeologists today doubt these figures, but, of course, the true statistics cannot ever really be determined. It is thought, though, that at least 100,000 people worked to build any single pyramid. Most of these workers were slaves. They worked on the tombs during times when the Nile River overflowed its banks and covered the fields. The Nile's flooding made farming impossible and made transportation of the stone to the pyramid site easier.

The Second and Third Pyramids of Giza were built by Khufu's successors. The tomb of Khafre is the Second Pyramid of Giza. (Khafre is spelled K-h-a-f-r-e.) It was originally three meters lower than the Great Pyramid; however, today it is only 0.8 meters lower. Its present height is 136.2 meters. The Third Pyramid, built for Menkaure, covers only half the area occupied by the Great Pyramid, and it is only 62.5 meters high. [Menkaureis spelled M-e-n-k-a-u-r-e.)

None of the later pyramids that were built during the next thirteen or fourteen centuries were nearly as large or as magnificent as the Pyramids of Giza. And even though pyramid building continued right up into the Eleventh and Twelfth Dynasties (that was up through about 1786 B.C.E.), it was becoming increasingly clear to the pharaohs and the nobles of Egypt that the pyramid method of burial provided very little or no protection at all for their royal corpses. The pyramids were, of course, impressive and lasting monuments, but they were all too visible. They invited grave robbers to try to break into them. And so eventually, one of the pharaohs, King Thutmose I, decided to sacrifice publicity for safety in the construction of his House of Eternity. I don't need to spell Thutmose for you, do I? Instead of ordering the construction of a pyramid, Thutmose had his tomb dug out of the rock of a valley far from the Nile River and far from Cairo. The spot he chose was some eleven kilometers from the river on its west bank. The area is now known as the Valley of the Kings. Many pharaohs followed Thutmose's example. After him, most of the pharaohs abandoned above-ground pyramid construction in favor of underground hiding places as the burial places for their precious royal bones. And yet, what

is so ilonic is that even these tombs did not escape the attacks of the grave robbers-persistent devils that they were!

I'll end this discussion by pointing out that, when the ancient Greeks first saw the Great Pyramids of Egypt, the pyramids were already 2,000 years old. The Greeks called them one of the Seven Wonders of the World. Almost nothing remains of the other six Wondersthe Hanging Gardens of Babylon, the Temple of Diana, and so on-but the three mighty Pyramids of Giza, as well as thirty-two other recognizable pyramids, still stand. These pyramids of Egypt are monuments to a great and ancient civilization and to people's endless search for eternal recognition and eternal life.

### Chapter 3 The Egyptian Pyramids: Houses of Eternity

# **Q** B. Listening and Notetaking Script

To many people throughout the world, some of the most remarkable and puzzling monuments of ancient times are the pyramids of ancient Egypt. You know, almost nothing at all remains of the great cities of the kings of Egypt, the pharaohs. Time and weather have been really hard on ancient Egypt's cities and towns, but several of the temples, statues, and, most important of all, the pyramids have survived. Even though many of the pyramids are in ruins, they still give us some idea of the magnificence of ancient Egypt's civilization-a civilization that, after all, lasted for more than 3,000 years. Remember when we're talking about ancient Egypt, we're talking about at least thirty consecutive dynasties. A dynasty is a series of kings or queens of the same royal family-something like the Romanovs of Europe, the Ming dynasty of China, or the Al-Sauds of Saudi Arabia.

OK. The introduction to the lecture was just that . . . An introduction to the general topic of the lecture, the remarkable pyramids of Egypt. The lecturer notes that almost nothing remains of the once-great cities, but the great pyramids have survived, though many are in ruins. The lecturer did mention how long the civilization of Egypt lasted. Did you note down the figure! Did you also note down how many dynasties or royal families ruled for the 3,000 years mentioned! I wonder if you felt the need to write down in your notes the names of the famous dynasties the lecturer mentioned. Why or why not! In a sentence, can you sum up the introductory message of the lectutet

Let's continue taking notes. The lecturer opened this part of the lecture With an evident fact-that the pyramids were constructed as tombs. You might want to abbreviate the word tomb With the letter t and every time you hear the lecturer mention information about tombs in this lecture, you can use the letter t to save you notetaking time. You'll be taking notes for a longer period of time now, so try to capture the ideas and the details so you can reconstruct the information you hear at a later time.

As many of you probably already know, the pyramids were constructed as tombs or burial places for the Egyptian kings and their family members. You see, the ancient **Egyptians** passionately believed in life after death. In fact, their entire culture revolved around that belief. The kings, queens, and state officials often spent an entire lifetime preparing for their life after death. They did this by collecting possessions or "grave goods," by building tombs, and so forth. The Egyptians believed that they could be assured of an afterlife only if their bodies could be preserved from decay or destruction. So when a person died, and especially when a pharaoh died, in order to ensure his eternal life, he had his body embalmed or mummified. In other words, he had his corpse dried out and wrapped in linen to preserve it from decay. Then he had his mummy hidden. This whole idea may seem quite strange today, but the ancient Egyptians really believed that if one's mummy was destroyed, then his or her soul would be destroyed, and if, on the other hand, the mummy-the dead body-was preserved, the soul would be immortal. Let me repeat that. If one's mummy was preserved, the soul would go on living.

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I'm going to give you an outline of the information in this section of the lecture. Look at your notes. Did you attempt to organize the information in outline form? You may not have gotten too far in doing it the first time you take notes, but if you can make an outline that is meaningful to you while you're listening, you can go back later and make a more formal outline of the information when you have a chance to fill in more information.

OK. The pyramids were constructed at burial places for the ancient Egyptian royal family members. What notations (or abbreviations) did you need to make in your notes to be able to reconstruct this ideal It will, no doubt, vary with individual notetakets. Each of us takes notes differently, and remember-

you only need to interpret the notes yourself, so you can develop a system that works for you. But this is an aside. I'll get back to the outline of the critical pieces of information in the lecture. OK. The ancient Egyptians believed in life after death. As a result, they prepared for their afterlife by building tombs and by collecting possessions or "grave goods" for their tombs. The Egyptians believed that they could be assured of an afterlife only if their bodies could be preserved from decay or destruction. To ensure eternal life, the pharaohs had their bodies embalmed or mummified. If one's mummy was destroyed, then the soul would be destroyed. The Egyptians had another **belief**; they believed they could take food, clothing, furniture, weapons, and even servants. And you know what happened to some of the Pharaoh's servants when he died, right? But the rich and powerful pharaohs couldn't keep their bodies and treasures safe from a certain group of people. Who were they? What did the lecturer say about a grave robbers' union? Let's return to the lecture and listen as the lecturer describes the evolution of the pyramid structure. You will listen to a number of facts and figures in this part of the lecture. You'll need to listen carefully and write down the dates the lecturer gives on the dynasties. Are you ready to take some notes?

As for the actual construction of the mighty pyramids, it was during the First and Second Dynasties that the kings and nobles of Egypt began to construct the type of tomb called the "mastaba." The First and Second Dynasties lasted from about 3100 until 2665 B.G.E. Mastaba, by the way, comes from an Arabic word meaning "bench" or "long seat." A mastaba looked like a low, flat-topped rectangle-something like a low bench or a shoebox. Essentially, the pointed pyramid was no more than an extension upward of the flat-topped mastaba.

The first "typical" pyramid (or, at least what most people generally think a pyramid looks like] was built during the Third Dynasty (which lasted roughly from about 2664 until 2615 B.G.E.) This pyramid was for King Zoser (that's spelled Z-o-s-e-r) in about 2650 B.G.E. It was built by an architect named Imhotep [l-m-h-o-t-e-p]. This pyramid was constructed as a series of giant steps or stairs. It, along with others of its type, is called the Step Pyramid. It was really simply a pile of mastabas, each step smaller and higher than the one before. The Step Pyramid of King Zaser was different from the later pyramids because it was never covered with stone to give it a smooth surface.

OK, check your notes. What was the first type of pyramid constructed and when was it begun? Right. It was during the First and Second Dynasties that the kings and nobles of Egypt began to construct the type of tomb called the "mastaba." How long did the First and Second Dynasties last From about 3100 until 2665 B.G.E. The lecturer defined the Arabic word mastaba. What did you write down in your notes? You could have drawn a picture of a low bench or a shoe box and then drawn a picture with the bench

extended upward into a mastaba. Notes don't and can't always be in word form. Illustrations work also in certain cases. Continuing ... The lecturer noted that the first "typical" pyramid was built during the Third Dynasty. How long didthe Third Dynasty lastt Let me ask some other questions: (1) Who was the first pyramid built fori Check your notes. (2) When was Zoset's pyramid built! and (3) who built itt (4) What did it look liket If you got the information down in your notes, you should be able to answer all those questions. How did the Step Pyramid of King Zoser differ from the later pyramids! Check your notes. OK. We'll return to the lecture and finish up our notetaking. The information won't be repeated after you hear it this time, so you'll have to listen carefully and work out a method for taking down the information in note form. Ready!

Actually, it was not until the Fourth Dynasty that the most famous pyramids were built. The three great pyramids of Giza belong to the Fourth Dynasty pyramids. (The Fourth Dynasty covered the period from 2614 to 2502 B.C.E.) They are located near the town of Giza, on the west bank of the Nile River, just outside the capital city of Egypt-Cairo. The Great Pyramids are really the very best preserved of all the Egyptian pyramids. The largest of these pyramids is known as the Great Pyramid. And great it is! It was built for King Khufu (that's K-hu-f-u). (Khufu was called Cheops [C-h-e-o-p-s] by the Greeks, and so the pyramid is sometimes called the pyramid of Cheops.] It has been estimated that 2.3 million blocks of limestone were used to build the Great Pyramid. The blocks averaged 2,500 kilograms each. The largest stone block weighs about 15,000 kilos. The base of the pyramid covers 5.3 hectares-an area large enough to hold ten football fields. There's a story that the conqueror Napoleon once sat in the shadow of the Great Pyramid and calculated that the mass of stone in the pyramid could be used to build a wall three meters high by 0.3 meters thick around the entire country of France: In terms of height, the pyramid was originally 147 meters high, but today the top 10 meters are missing, and the entire outer limestone covering has been stripped away. It seems that local builders and conquerors found it convenient to strip off the limestone from the pyramids and use it to build with.

The Great Pyramid of Khufu is considered a wonder of ancient architecture. When you look at it, you immediately wonder how on earth the ancient Egyptians ever managed to build such a structure with only basic mathematics, with no modern machinery (such as cranes, bulldozers, and so forth), and with no iron tools. They had to cut the big limestone blocks with tools made of copper, which is a rather soft metal. But they managed to do it. The ancient Greek historian, Herodotus (that's H-e-r-o-d-o-t-u-s)-Herodotus said that 400,000 men worked for twenty years to build the Great Pyramid. Archaeologists today doubt these figures, but, of course, the true statistics cannot ever really be determined. It is thought, though, that at least 100,000 people worked to build any single pyramid. Most of these

workers were slaves. They worked on the tombs during times when the Nile River overflowed its banks and covered the fields. The Nile's flooding made farming impossible and made transportation of the stone to the pyramid site easier.

The Second and Third Pyramids of Giza were built by Khufu's successors. The tomb of Khafre is the Second Pyramid of Giza. (Khafre is spelled K-h-a-f-r-e.) It was originally three meters lower than the Great Pyramid, however, today it is only 0.8 meters lower. Its present height is 136.2 meters. The Third Pyramid, built for Menkaure, covers only half the area occupied by the Great Pyramid, and it is only 62.5 meters high. (Menkaure is spelled M-e-n-k-a-u-r-e.)

None of the later pyramids that were built during the next thirteen or fourteen centuries were nearly as large or as magnificent as the Pyramids of Giza. And even though pyramid building continued right up into the Eleventh and Twelfth Dynasties (that was up through about 1786 BC.E.), it was becoming increasingly clear to the pharaohs and the nobles of Egypt that the pyramid method of burial provided very little or no protection at all for their royal corpses. The pyramids were, of course, impressive and lasting monuments, but they were all too visible. They invited grave robbers to try to break into them. And so eventually, one of the pharaohs, King Thutmose I, decided to sacrifice publicity for safety in the construction of his House of Eternity. I don't need to spell Thutmose for you, do I? Instead of ordering the construction of a pyramid, Thutmose had his tomb dug out of the rock of a valley far from the Nile River and far from Cairo. The spot he chose was some eleven kilometers from the river on its west bank. The area is now known as the Valley of the Kings. Many pharaohs followed Thutmose's example. After him, most of the pharaohs abandoned above-ground pyramid construction in favor of underground hiding places as the burial places for their precious royal bones. And yet, what is so ironic is that even these tombs did not escape the attacks of the grave robbers-persistent devils that they were!

I'll end this discussion by pointing out that, when the ancient Greeks first saw the Great Pyramids of Egypt, the pyramids were already 2,000 years old. The Greeks called them one of the Seven Wonders of the World. Almost nothing remains of the other six Wondersthe Hanging Gardens of Babylon, the Temple of Diana, and so on-but the three mighty Pyramids of Giza, as well as thirty-two other recognizable pyramids, still stand. These pyramids of Egypt are monuments to a great and ancient civilization and to people's endless search for eternal recognition and etemallife.

Well, how did you do on your own with this part of the lectutel There was a great deal of information and you needed to decide how much to write down and how much to rely on your memory. You'll be having an examination on the material, and you can use your notes to refresh your memory, but you still need to develop your own system for listening and taking notes on a lecture presentation. You'll have lots of practice by the time you finish this course of instruction.

Unit Two

# History: The Passing of Time and Civilizations

#### Chapter 4 The FirstEmperor of China: BUilding an Empire and a House of Eternity

**A**. Orientation Listening Script

The fields of history and archaeology go hand in hand. Let me explain what I mean. History is often the story of a particular person, a person like the Emperor Napoleon. Or, history is the story of a nation, such as the country of France. On the other hand, archaeology is the study of the people, the customs, and the **life** of ancient times. Archaeologists find out about these ancient times by studying the ruins of cities, monuments or tombs, or any written records that remain.

In today's lecture I'm going to talk a little about a particular person in ancient Chinese history, and I'm also going to talk about one of the greatest archaeological discoveries of the late twentieth century. The history part of my talk will be about Qin Shihuang, who was the founder of the first unified empire in China. He lived between 259 D.C.E. and 210 D.C.E., and he is often called the First Emperor of China. Just as the exploits of the Emperor Napoleon still fascinate many people and scholars today, so does the story of Qin Shihuang and his house of eternity. Today, I'm also going to be talking about what has been found, to date, in the area of Qin Shihuang's tomb. We don't know what additional treasures of Chinese history and culture will be found in the tomb area (or tomb mound) in the future, but what has been discovered so far is an incredible find for ancient Chinese history and archaeology.

To set the historical context for the excavation of Qin Shihuang's House of Eternity, I'd like to first talk a little bit about the man himsell. His name was Ying Zheng. And before he unified the empire in 221 D.C.E., China had been tom apart by wars between seven regional kingdoms. Under the leadership of Ying Zheng, one of these regional kingdoms, the Kingdom of Qin, eventually defeated the other six kingdoms. Ying Zheng's defeat of the other six kingdoms accomplished two things: First, it ended the power of these other six kingdoms. Second, the unification of the seven kingdoms started a centralized imperial system that lasted more than 2,000 years.

When he became Emperor, Qin Shihuang did a number of things to unify and protect his empire. First, he standardized the system for writing Chinese characters. Prior to his unification of the empire, the writing of Chinese characters varied in the different kingdoms. When Qin Shihuang became Emperor, he decreed that a standardized system of Chinese characters was to be used throughout the empire. Next, he decreed that there would be just one system of weights and measures, and one system of currency, rather than many different systems, as had been the case before unification.

To protect his new empire from the barbarian tribes to the north, he ordered the construction of the Great Wall of China. Now, there already were small walls scattered across the northwest frontier of the empire, but Qin Shihuang had these walls joined together to create 1,500 miles of fortification and protection for his empire. Qin Shihuang also began an enormous road-building project. In the second year after unification, construction of three major imperial highways was begun. These highways eventually stretched approximately 6,800 kilometers (or 4,225 miles] throughout the empire. Just in comparison, by the year 150 C.E. the Roman Empire's road system was about 5,984 kilometers or 3,718 miles. The Roman Empire's system stretched all the way from Scotland to Rome and then to Jerusalem.

Qin Shihuang also began another large construction project-the building of his tomb or mausoleum. It seems that as soon as the Emperor gained power, he became preoccupied with death, and with constructing a magnificent House of Eternity for his afterlife. At this point, I'm going to segue from talking about the biography of Qin Shihuang to talking about the archaeology part of my lecture. Let's see. OK. As I mentioned, when Qin Shihuang became emperor, he immediately began construction of his House of Eternity. And what an incredible House of Eternity it was! Archaeologists believe that 700,000 laborers were forced to work on the tomb for about eleven years. The entire area of the tomb covers approximately 56.25 square kilometers. It is believed that the tomb was intended to be a microcosmic replica of the Qin capital around the years 221 to 210 B.C.E. Archaeologists also believe that Qin Shihuang's tomb contained imperial palaces filled with rare gems and other treasures, and that it also contained gardens and temples. It is even believed that the chemical mercury was pumped through the tomb to create the image of flowing rivers in the tomb area. Can you imagine rivers of mercury in a tomb? A 12,000-square-meter area at the site of the tomb has a very high mercury content-in fact, ten times higher than that of the surrounding area so archaeologists think that it is very likely that the mercury rivers did, indeed, flow through the tomb area.

Without a doubt, the most striking features of the Emperor Qin's House of Eternity are the terracotta warriors and horses found in the tomb area. In 1975, Chinese authorities built a museum on the excavation site to preserve these terracotta warriors and horses, and the other incredible treasures that were being uncovered. Today, the museum covers an area of 16,300 square meters. That means the area is more than two football fields long! The area is divided into three sections, or what are called pits: No.1 Pit, No.2 Pit, and No.3 Pit. No.1 Pit is the largest of the three pits; it's approximately 960 square meters in size. It first opened to the public on China's National Day in 1979. In No.1 Pit, there are columns of soldiers at the front, followed by war chariots at the back. It is estimated that there are 3,210 terracotta foot soldiers in this pit, alone. **Two** years later, in 1976, No.2 Pit was unearthed. It contained nearly a thousand warriors and ninety wooden chariots. This pit was opened to the public in 1994, and today visitors from all over

the world go to see Qin Shihuang's House of Eternity, and to see his terracotta army that was to protect his tomb. Altogether more than 7,000 terracotta soldiers, horses, chariots, and even weapons have been found in these three pits, and more will likely be found in the future as archaeologists continue to explore and excavate the tomb area.

I'd like to finish up my talk by referencing what Peter Hassle of *National Geographic* magazine says about the ancient Chinese emperors' view of the afterlife. Mr. Hassle says that the emperors of ancient China saw the afterlife as a continuation of life on Earth, much as the ancient Egyptians did. He also notes that archaeologists working on the tomb of the First Emperor of China are "dusting off a window to the past." They're dusting off this window to give us a vision of what mattered to the ancient rulers and their cultures. We have much more to learn from the tomb of the First Emperor of China as excavation of the tomb area continues. We don't know when the excavation will be complete. Chinese officials say that the tomb mound of the first Chinese emperor will not be excavated until preservation techniques have advanced significantly.

Well, that's about all I have to say for today. For homework, I'd like you to read the description in your textbook of the terracotta warriors and horses found in Qin Shihuang's tomb. See you next time.

## Chapter 4 The First Emperor of China: Building an Empire and A House of Eternity

# **Q** B. Listening and Notetaking Script

The fields of history and archaeology go hand in hand. Let me explain what I mean. History is often the story of a particular person, a person like the Emperor Napoleon. Or, history is the story of a nation, such as the country of France. On the other hand, archaeology is the study of the people, the customs, and the life of ancient times. Archaeologists find out about these ancient times by studying the ruins of cities, monuments or tombs, or any written records that remain.

All right, let's see what information you had a chance to write down in your notes. Did you note that history and arachaeology go together-or as the lecturer said "hand in hand." You could have drawn a picture of a hand, but you needed, at least, to write down "history" and "archaeology." Of course, you would want to abbreviate the words rather than write the words out. Perhaps you could abbreviate the two words "bist." or even "h" for history. And "a." or perhaps "arch." for archaeology. As long as you can decode your abbreviations and drawings after the lecture when you are rewriting it or studying for an exam, that's all that matters.

The lecturer then mentioned a few things. If you didn't have time to write them down before, be sure to get them down **in** your notes now. He said, "History is often the story of a particular person or of a nation." You could reduce **this** information to a code like "H. - st. - parn." He then gave an example of a person and nation. What and who were **they?** Right. "Napoleon" and

"France." If you think you can remember these examples, there would be no need to write them down, but that's your choice.

The next important point was that archaeologists find out about ancient times by **studying** the **ruins** of cities, monuments, or tombs, or, for that matter any records that remain. The critical information words were: archaeologists (Did you abbreviate the words), ruins; cities; monuments; tombs; records that remain. How many of these words **did** you get a chance to note downt It doesn't matter if you don't spell the words correctly since you can correct the spelling after class when you have time. Now let's return to the lecture.

In today's lecture I'm going to talk a little about a particular person in ancient Chinese history, and I'm **also** going to talk about one of the greatest archaeological discoveries of the late twentieth century. The history part of my talk will be about Qin Shihuang who was the founder of the first unified empire in China. He lived between 259 B.C.E. and 210 B.C.E., and he is often called the First Emperor of China. Just as the exploits of the Emperor Napoleon still fascinate many people and scholars today, so does the story of Qin Shihuang and his house of eternity. Today, I'm also going to be talking about what has been found, to date, in the area of Qin Shihuang's tomb. We don't know what additional treasures of Chinese history and culture will be found in the tomb area (or tomb mound) in the future, but what has been discovered so far is an incredible find for ancient Chinese history and archaeology.

Let's take a moment. Are you ready to check your notes! The lecturer says he will be talking about two things: (1) a particular person in history and (2) a great archaeological discovery-perhaps one of the greatest archaeological discoveries of the late twentieth century. Did you get down enough information in your notes to answer the test questions, such as "What were the two main topics of discussion in the lecturet" Exactly. A historical person and an archaeological discovery. When you examine the few scribbles you wrote down for this section of the lecture, they should spark the idea that the lecturer was talking about one of the greatest archaeological discoveries of the late twentieth century. OK. Fine. Let's go on.

To set the historical context for the excavation of Qin Shihuang's House of Eternity, I'd like to first talk a little bit about the man himself. His name was Ying Zheng. And before he unified the empire in 221 B.C.E., China had been tom apart by wars between seven regional kingdoms. Under the leadership of Ying Zheng, one of these regional kingdoms, the Kingdom of Qin, eventually defeated the other six kingdoms. Ying Zheng's defeat of the other six kingdoms accomplished two things: First, it ended the power of these other six kingdoms. Second, the unification of the seven kingdoms started a centralized imperial system that lasted more than 2,000 years.

Look at your notes. Repeat in your mind (or to a classmate) this section of the lecture using the notes you just took. (I'll wait

ten seconds while you repeat this section of the lecture to yourself or a classmate.} OK. Did you outline the information, using a, b, c, or 1, 2, 3, or just dashes! It's up to you to decide whether and how you will organize and outline your notes. The critical questions are the following: Could you answer the following four questions by looking in your notes! (1) When did Ying Zheng unify the empire! The answer: 221 B.C.E. (2) What was happening before he unified the empire! The answer: the seven kingdoms in China were at peace. Umm. No/ I mean the kingdoms were at war, right! (3) What kingdom defeated and ended the power of the other six kingdoms! Answer: The kingdom of Qin. Good. Finally, how long did the dynasty of Qin Shihuang lastt Yes, 2,000 years. Again, did you outline and abbreviate the information!

Let's return to the **lecture**. You'll have a longer segment to take notes on before I break in to monitor your notetaking.

When he became Emperor, Qin Shihuang did a number of things to **unify** and protect his empire. First, he standardized the system for writing Chinese characters. Prior to his unification of the empire, the writing of Chinese characters varied in the different *kingdoms*. When Qin Shihuang became Emperor, he decreed that a standardized system of Chinese characters was to be used throughout the empire. Next, he decreed that there would be just one system of weights and measures, and one system of currency, rather than many different systems, as had been the case before unification.

To protect his new empire from the barbarian tribes to the north, he ordered the construction of the Great Wall of China. Now, there already were small walls scattered across the northwest frontier of the empire, but Qin Shihuang had these walls joined together to create 1,500 miles of fortification and protection for his empire. Qin Shihuang also began an enormous road-building project. In the second year after unification, construction of three major imperial highways was begun. These highways eventually stretched approximately 6,800 kilometers (or 4,216 miles) throughout the empire. Just in comparison, by the year 150 C.B. the Roman Empire's road system was about 5,984 kilometers or 3,710 miles. The Roman Empire's system stretched all the way from Scotland to Rome and then to Jerusalem.

Catch your breath for a moment. In this segment of the lecture, the speaker talked about the things Qin Shihuang did to unify and protect his empire. Look at your notes. What were the things he did! For one thing, he standardized the writing of Chinese characters throughout the empire. Did you write that down! He also decreed (or said) there was to be one system of weights and measures. And he did something else. Look at your notes. What was the next major change! Right. It had to do with the Great Wall of China. He joined some walls that were in place and he made a very long wall for fortification of his empire. How long was the wall! Right 1,500 miles. Two years after he became Emperor, he did something else. Look at your notes, and tell what his next

major accomplishment was. It involved construction of three highways, right? The lecturer makes a comparison between the Chinese and Roman highway systems of the time. Tell a classmate what the difference was between the two systems. I'll wait ten seconds for you to do this by repeating the information to yourself or a classmate.

All right, we'll get back to the part of the lecture that deals with the building and excavation of the Emperor's tomb. Are you ready to take more **notes!** 

Qin Shihuang also began another large construction project-the building of his tomb or mausoleum. It seems that as soon as the Emperor gained power, he became preoccupied with death, and with constructing a magnificent House of Eternity for his afterlife. At this point, I'm going to segue from talking ab'out the biography of Qin Shihuang to talking about the archaeology part of my lecture. Let's see. OK. As I mentioned, when Qin Shihuang became emperor, he immediately began construction of his House of Eternity. And what an incredible House of Eternity it was! Archaeologists believe that 700,000 laborers were forced to work on the tomb for about eleven years. The entire area of the tomb covers approximately 56.25 square kilometers. It is believed that the tomb was intended to be a microcosmic replica of the Qin capital around the years 221 to 210 B.C.E. Archaeologists also believe that Qin Shihuang's tomb contained imperial palaces filled with rare gems and other treasures, and that it also contained gardens and temples. It is even believed that the chemical mercury was pumped through the tomb to create the image of flowing rivers in the tomb area. Can you imagine rivers of mercury in a tomb? A 12,000square-meter area at the site of the tomb has a very **high** mercury content-in fact, ten times higher than that of the surrounding area so archaeologists think that it is very likely that the mercury rivers did, indeed, flow through the tomb area.

Check the notes you just took. The first segment of the lecture covered the building of Qin Shibuang's tomb. The lecturer mentioned the number of laborers who worked on the tomb and the number of years they worked. Did you get this information down in your **notes**? The next point made by the lecturer was about the size of the tomb area. Look at your notes and describe the size of the tomb area. He also mentioned that the tomb was to be a "microcosmic replica" or a "copy" of the Qin capital of the time. Did you write this down! Next, he mentions that the tomb contains palaces, treasures. What else! Right, gardens and temples. If you didn't get all those items down, you would have to rely on your memory of the information. It might be good if you could even get down a letter such as g for gardens or a t for temples. Whatever works for you to help you develop your notetaking skills. Finally, the lecturer talked about mercury being pumped **into** the tomb to create rivers. Amazing! Did archaeologists find the mercury level in one area of the tomb to be two times, or ten times higher than

usual! Check your notes, or can you rely on your memory for this fact! It was ten times higher, right! Back to the lecture.

Without a doubt, the most striking features of the Emperor Qin's House of Eternity are the terracotta warriors and horses found in the tomb area. In 1975, Chinese authorities built a museum on the excavation site to preserve these terracotta warriors and horses, and the other incredible treasures that were being uncovered. Today, the museum covers an area of 16,300 square meters. That means the area is more than two football fields long! The area is divided into three sections, or what are called pits: No.1 Pit, No.2 Pit, and No.3 Pit. No.1 Pit is the largest of the three pits, it's approximately 960 square meters in size. It first opened to the public on China's National Day in 1979. In No.1 Pit, there are columns of soldiers at the front, followed by war chariots at the back. It is estimated that there are 3,210 terracotta foot soldiers in this pit, alone. Two years later, in 1976, No.2 Pit was unearthed. It contained nearly a thousand warriors and ninety wooden chariots. This pit was opened to the public in 1994, and today visitors from all over the world go to see Qin Shihuang's House of Eternity, and to see his terracotta army that was to protect his tomb. Altogether more than 7,000 terracotta soldiers, horses, chariots, and even weapons have been found in these three pits, and more will likely be found in the future as archaeologists continue to explore and excavate the tomb area.

There was a good bit of detail in this short section of the lecture. Let me review the details. Check your notes as I review.

As amazing as the point the lecturer makes about the mercury rivers is, what does he indicate is really the most incredible find in Qin Sbibuang's tomb! Right, the terracotta warriors and horses and other treasures. You might have just written the letters t, c, and w in your notes to represent the words terracotta warriors and h for horses. Or did you attempt a stick image of the warriors and horses! Whatever takes less time is the best thing to do. Let's see . . .

In 1975, a museum was established on the site. The museum covers 16,300 square meters (ormore than two football fields) and is made up of three pits. Pit No.1 is the largest. How large is it? 960 square meters. When was it opened! On China's National Day in 1939. I mean in 1979. In the tomb there are 3,210 soldiers in the front and chariots in the back of the tomb. Is that correct! In what year was No.2 pit opened to the public! Did you note down 1999! Or just 99? It takes longer to write down 1999, no? A last question. Can you anticipate the question that's coming! Look at your notes. How many terracotta soldiers or warriors and horse were unearthed! Right. More than 7,000. Let's finish up the lecture and your notetaking.

I'd like to finish up my talk by referencing what Peter Hassle of *National Geographic* magazine says about the ancient Chinese emperors' view of the afterlife. Mr. Hassle says that the emperors of ancient China saw the afterlife as a continuation of life on Earth, much as the

ancient Egyptians did. He also notes that archaeologists working on the tomb of the First Emperor of China are "dusting off a window to the past." They're dusting off this window to give us a vision of what mattered to the ancient rulers and their cultures. We have much more to learn from the tomb of the First Emperor of China as excavation of the tomb area continues. We don't know when the excavation will be complete. Chinese officials say that the tomb mound of the first Chinese emperor will not be excavated until preservation techniques have advanced significantly.

Well, that's about all I have to say for today. For homework, I'd like you to read the description in your textbook of the terracotta warriors and horses found in Qin **Shihuang's** tomb. See you next time.

That's it for the notetaking part of the lecture about the First Emperor of China and his House of Eternity. The lecturer cites a writer at National Geographic magazine. His name is Peter Hassle, but if the lecturer didn't spell out the name, I doubt that you'd have to worry about getting the name right as you were taking notes. You could ask a classmate (or the lecturer) after the lecture to check the spelling of the name if you wished to. The important points in this segment of the lecture seemed to be: (1) that the emperors of ancient China believed the afterlife was a continuation of life on Earth-like the pharaohs of Egypt. (2) Archaeologists are opening (or dusting off) a window to the past and that we have more to learn in the future from the tomb of Qin Sbihuang.

Unit Three Sociology:
Women, Men, and Changing Roles

Chapter 5 The Women's Movement From Liberation to Feminism

# **A**. Orientation Listening Script

The women's movement in the United States is a social movement that is nearly a century and a half old, according to Barbara Ryan, author of *Feminism and the Woman's Movement*. According to Ryan, organized activity on behalf of women's rights began in the mid-1800s when, both by law and by custom, women were considered "nonpersons." Married women, for example, were prevented by law from inheriting property, from controlling the money they earned, or from retaining custody of their children if they were divorced by their husbands. In addition, no woman was allowed to vote on the laws that governed her life.

In the early 1900s, important changes occurred in the social and political climate in Europe and the United States as a result of World War I. After the war, a number of countries granted women the right to vote, and in 1920, American women gained the right to vote. Twenty years later, another war brought major social changes that affected the lives

of many men and women. One of the social changes involved women working outside the home. During World **War** II, large numbers of women entered the job market to do the jobs of the men who had been drafted into military service. A great many of these women became factory workers and they proved themselves to be capable and dependable workers. Today, women have gained more employment and job opportunities, and they hold different jobs and occupations. Women are breaking into male-dominated fields from sports writing to police work to firefighting, though their progress into these male-dominated professions is slow. In fact, women make up only 1.5 percent **of** the 200,000 professional firefighters in the United States today, and they make up only 4 percent of airline pilots and navigators.

In addition to entering male-dominated professions, many women are starting their own businesses and operating successful businesses today. It is becoming more common to find women occupying positions of leadership in American business. In fact, women-owned business is one of the fastest-growing segments of the United States economy. In 2003, for example, the U. S. Small Business Administration reported that in the United States, 9.1 million women-owned businesses employed 27.5 million people, and contributed \$3.6 trillion to the American economy. In other words, women business owners arc critically important to the American economy. According to a 2004 study by the Center for Women's Business Research, the nation's "hot spots" for women entrepreneurs are clustered in the western part of the United States. Idaho and Wyoming are tied for first place (followed by Utah, Nevada, and Arizona) as the five states in the United States where the greatest growth and expansion in women-owned businesses occurred. Between 1997 and 2004, on average, the number of womenowned businesses in these five states grew at more than twice the rate of the rest of the country. The average rate of women-owned businesses was 28.8 percent, compared to 14.0 percent for all other states in the United States. As many as ten years ago, women-owned businesses employed more people domestically than the Fortune 500 companies did worldwide.

Why are women entrepreneurs so successful? The founder and President of the American Women's Economic Development Corporation in New York, Beatrice Fitzpatrick, says"A woman would no more let her business fail than she would let someone kill her child." But for some women, success in business has not come without the costs of overwork, burnout, and potential damage to health, friendships, or family relationships. According to the authors of the book *Megatrends for Women*, the great challenge for millions of successful women entrepreneurs and other professionals is to maintain their success while being sure that they have a balance between work and their family and social lives.

Women have advanced to leadership positions not only in business, but also in politics. Women have become important political leaders all over the world though politics is still largely a male-dominated world. For instance, in 1969 in the United States, only 4 percent of the

state **lawmakers** were women. By 2003, this number had grown by more than 500 percent, and 22.3 percent of state legislators were women. Although this may seem like a great increase, it must be remembered that women make up more than 50 percent of the population in the United States, so they are not yet receiving equal representation in the world of politics in the United States. The United States has not yet had a woman president, although women have served as presidents of Ireland, Nicaragua, and the Philippines. Many other countries have had female political leaders. Women have served as prime ministers in the United Kingdom, France, Turkey, Pakistan, Canada, and Bangladesh.

The family has changed a lot since women have become so active outside the home. Today, less than 10 percent of American families have the traditional working father and the mother who stays home to take care of the children. To make up for the time that women are spending out of the home, many men are having to playa more active role in raising their children. Government and businesses are also becoming more concerned about helping working families with child care, but much more needs to be done to help women and men take care of their children while they are at work. In spite of the fact that the rate of women's participation in the workforce rose from 27 percent in 1940 to 57.6 percent in 2003 (including more than half of all women with a child under the age of one year, there is still no government-sponsored child-care or parental-leave policy in the United States. According to Barbara Ryan, a major obstacle to women's emancipation lies in the lack of government-sponsored social-service support for working women who have children to support.

Because problems are still preventing some women from taking an equal place in society, many people still believe that a women's movement is still necessary; however, many diverse opinions have emerged about how to achieve equality for women and men in work, education, politics, and the home. Some activists in the women's movement call themselves "feminists," whereas others who resist political activism choose not to label themselves "feminists" because they feel that the U.S. media often portray feminists as people who are anti-men. Most feminists do not take such an attitude, at all. In any case, the word feminism and the principles of feminism are not easy to define because they mean different things to different people. In her book Feminism and the Women's Movement, Barbara Ryan provides a number of definitions of the term feminism. She quotes one woman who says that in her opinion "feminism represents the best of what it means to be human. Anybody can be a feminist, except you have to work at it. Basically, to me, it is the belief that everybody should have the opportunity to be the best that they can be and we ought to have a world that encourages that."

The names and terms associated with the movement, however, are not nearly as important as the changes that feminism and the women's movement have caused in American society. Because of this centuryand-a-half old movement, women are contributing more to American society, and society is benefiting from their contributions. **As** a result of the women's movement, women's liberation, and feminism, women are enjoying new freedom, new opportunities, new responsibility-and new headaches.

## Chapter 5 The Women's Movement: From Liberation to Feminism

## **Q** B. Listening and Notetaking Script

The women's movement in the United States is a social movement that is nearly a century and a half old, according to Barbara Ryan, author of *Feminism and the Woman:s Movement*. According to Ryan, organized activity on behalf of women's rights began in the mid-lBOOs when, both by law and by custom, women were considered "nonpersons." Married women, for example, were prevented by law from inheriting property, from controlling the money they earned, or from retaining custody of their children if they were divorced by their husbands. In addition, no woman was allowed to vote on the laws that governed her life.

Let's stop for a minute and check your notetaking. What were the salient, or important, pieces of information you just beaxdt Did you write down the following [acts! The women's movement in the United States is nearly 150 years old. Did you have time to write down the name of Barbara Ryan's bookt Probably not. But did you attempt to abbreviate the title or to make some notations that you could return to after the lecture was finishedt The title of the book is Feminism and the Women's Movement. Did you spell Ryan's name correctly! Again, don't worry if you didn't. You could ask a friend after the lecture howher name is spelled. Actually, it's spelled R-y-a-n. Did you also write down that women were considered "nonpersons"}, Did you note that women couldn't inherit property, control their money, or keep their children if they got divoicedl Let's continue with the lecture.

In the early 1900s, important changes occurred in the social and political climate in Europe and the United States as a result of World War I. After the war, a number of countries granted women the right to vote, and in 1920, American women gained the right to vote. Twenty years later, another war brought major social changes that affected the lives of many men and women. One of the social changes involved women working outside the home. During World War II, large numbers of women entered the job market to do the jobs of the men who had been drafted into military service. A great many of these women became factory workers and they proved themselves to be capable and dependable workers. Today, women have gained more employment and job opportunities, and they hold different jobs and occupations. Women are breaking into male-dominated fields from sports writing to police work to firefighting, though their progress into these male-dominated professions is slow. In fact, women make up only 1.5 percent

of thd 200,000 professional firefighters in the United States today, and they make up only 4 percent of airline pilots and navigators.

There was a good deal more information in this section of the lecture than there was in the opening section of the lecture. Did you write down:

- that World War I brought social and political changes 1
- that after the war, many women were granted the right to votet
- that in the United States women got the vote in 19201
- that after World War II, women began working outside the home in jobs that men had donet
- that women were good workers-good factory workers1
- that today, women are entering male-dominated fields, for example, sportswriting, police work, and #refightingl

How much of this information were you able to write down! Let's continue practicing. Listen and write down what you **think** is important, and be sure not to try to write each word or even each sentence.

In addition to entering male-dominated professions, many women are starting their own businesses and operating successful businesses today. It is becoming more common to find women occupying positions of leadership in American business. In fact, women-owned business is one of the fastest-growing segments of the U.S. economy. In 2003, for example, the U.S. Small Business Administration reported that in the United States, 9.1 million women-owned businesses employed 27.5 million people, and contributed \$3.6 trillion to the American economy. In other words, women business owners are critically important to the American economy. According to a 2004 study by the Center for Women's Business Research, the nation's "hot spots" for women entrepreneurs are clustered in the western part of the United States. Idaho and Wyoming are tied for first place (followed by Utah, Nevada, and Arizona) as the five states in the United States where the greatest growth and expansion in women-owned businesses occurred. Between 1997 and 2004, on average, the number of women-owned businesses in these five states grew at more than twice the rate of the rest of the country. The average rate of women-owned businesses was 28.8 percent, compared to 14.0 percent for all other states in the United States. As many as ten years ago, women-owned businesses employed more people domestically than the Fortune 500 companies did worldwide.

Why are women entrepreneurs so successful? The founder and President of the American Women's Economic Development Corporation in New York, Beatrice Fitzpatrick, says"A woman would no more let her business fail than she would let someone kill her child." But for some women, success in business has not come without the costs of overwork, burnout, and potential damage to health, friendships, or family relationships. According to the authors of the book *Megatrends* 

for Women, the great challenge for millions of successful women entrepreneurs and other professionals is to maintain their success while being sure that they have a balance between work and their family and social lives.

Now what did you do with all the information in that segment of the lecture! Perhaps you just noted key words throughout. The information was dense, and it's unlikely you could write down more than a skeleton outline of the information. The important thing is that what you wrote is enough to help you reconstruct the key information when you review your notes. Let me reiterate the information in skeleton form and you check your notes. I repeat that you didn't need to write down all the information. You need to write enough codes that you could reconstruct the information when reading over your note codes.

OK. The lecturer mentioned the following pieces of information: Women are becoming successful in business and taking on leadership positions in businesses. Women-owned business is a fast-growing segment of the economy. In 2003, 9.1 million employed 27.5 million people and contributed \$3.6 trillion to the American economy. "Hot spots" for women entrepreneurs are in the western United States-in Idaho, Wyoming, Utah, Nevada, and Arizona, in that order. Between 1997 and 2004, women-owned businesses grew at twice the rate of the rest of the country. In fact, women-owned business employed more people domestically than the Fortune 500 companies did worldwide. Success in business has cost women dearly. They have experienced overwork, burnout, health problems, and success has been hard on friendships and family relationships. The authors of the book Megatrends for Women say women face the challenge of maintaining success while keeping a balance between work and their family and social lives. OK. Let's return to the lecture.

Women have advanced to leadership positions not only in business, but also in politics. Women have become important political leaders allover the world though politics is still largely a male-dominated world. For instance, in 1969 in the United States, only 4 percent of the state lawmakers were women. By 2003, this number had grown by more than 500 percent, and 22.3 percent of state legislators were women. Although this may seem like a great increase, it must be remembered that women make up more than 50 percent of the population in the United States, so they are not yet receiving equal representation in the world of politics in the United States. The United States has not yet had a woman president, although women have served as presidents of Ireland, Nicaragua, and the Philippines. Many other countries have had female political leaders. Women have served as prime ministers in the United Kingdom, France, Turkey, Pakistan, Canada, and Bangladesh.

The lecturer mentioned some of the important women political leaders-although there aren't many of them, are there! She men-

States are women. What was that percentage? Can you answer this question by looking at your notes? If so, great. There were a number of other statistics in this segment of the lecture. What was said about 500 percent? What about 22.3 percent? Did you write down a statistic of more than 50 percent? Did you remember to write 50 percent and not iust 50? What did the lecturer say about the statistic? Can you name the countries that have had women prime ministers? Look at your notes to find the information. Did you abbreviate the names of the countries? "Pt" for France? "Tur" for Turkey? And so forth. Fine. Let's continue with the lecture with the discussion of how the family has changed since women started working outside the home.

The family has changed a lot since women have become so active outside the home. Today, less than 10 percent of American families have the traditional working father and the mother who stays home to take care of the children. To make up for the time that women are spending out of the home, many men are having to playa more active role in raising their children. Government and businesses are also becoming more concerned about helping working families with child care, but much more needs to be done to help women and men take care of their children while they are at work. In spite of the fact that the rate of women's participation in the workforce rose from 27 percent in 1940 to 57.6 percent in 2003 (including more than half of all women with a child under the age of one year, there is still no government-sponsored child-care or parental-leave policy in the United States. According to Barbara Ryan, a major obstacle to women's emancipation lies in the lack of government-sponsored social service support for working women who have children to support.

**Once** again, **the lecturer** provided a number of statistics to support her statement that the traditional family has undergone change. **She** mentioned that fathers are taking a more active role in raising their children. She also said that government and business are becoming concerned about helping families with child care, but they haven't done enough. Many more women are working. In 1940, what percentage of women were working? Can you find that information in your notes! (pause) Yes, 27 percent. What did that percentage change to in 2003? (pause) Right, 57.6 percent. That's quite a change! OK. Although so many women are working today, there still is no government-sponsored child-care or parental-leave policy in the United States, if you can believe it! The lecturer noted that Barbara Ryan, **the** author of **the** book mentioned at **the** beginning of the lecture, suggests that this lack of a government-sponsored social-service support for working **women** is a maiot obstacle to women's liberation, or as she said, "women's emancipation."

Let's return to the lecture now as the speaker finishes up her talk. You will take notes on this segment without any prompting. See how you do on your own.

Because problems are still preventing some women from taking an equal place in society, many people still believe that a women's movement is still necessary; however, many diverse opinions have emerged about how to achieve equality for women and men in work, education, politics, and the home. Some activists in the women's movement call themselves "feminists," whereas others who resist political activism choose not to label themselves "feminists" because they feel that the U.S. media often portray feminists as people who are anti-men. Most feminists do not take such an attitude, at all. In any case, the word feminism and the principles of feminism are not easy to define because they mean different things to different people. In her book Feminism and the Women's Movement, Barbara Ryan provides a number of definitions of the term feminism. She quotes one woman who says that in her opinion "feminism represents the best of what it means to be human. Anybody can be a feminist, except you have to work at it. Basically, to me, it is the belief that everybody. should have the opportunity to be the best that they can be and we ought to have a world that encourages that."

The names and terms associated with the movement, however, are not nearly as important as the changes that feminism and the women's movement have caused in American society. Because of this centuryand-a-half old movement, women are contributing more to American society, and society is benefiting from their contributions. As a result of the women's movement, women's liberation, and feminism, women are enjoying new freedom, new opportunities, new responsibility-and new headaches.

Well, your task is now complete. Are you beginning to feel more comfortable with listening and taking down notes that can be used to spark your memory and to reconstruct the information you heard! You will develop your own strategies for taking effective notes as we continue to work through the Advanced Listening Comprehension notetaking program. The main thing is that your strategies make sense to you and that they're useful to you.

Unit Three | Sociology: | Women, Men, and Changing Roles

#### Chapter 6 The Men's Movement: What Does It Mean to Be a Man?

## **A** A. Orientation Listening Script

The women's movement has gained a lot of attention in recent years in the U.S., and in countries around the world, as you heard in the last lecture. The women's movement has inspired many women to fight for equal rights and treatment in their homes, their personal relationships, and at work. It has also forced many women to examine and to rethink the roles they play in society. However, not only have women begun to examine and rethink the roles they play at home and work, and in modem society as a whole, but men also have begun to examine and rethink the **roles** they play in society, and to examine and rethink the various and <u>changing</u> roles they must play at home and work today.

Men have also begun to react in both positive and negative ways to the new expectations they must meet at home and work. Some men are adjusting well to the new roles they must playas more and more women enter the job market, and some men are pleased that their wives and partners have jobs outside the home. However, some of the role changes men are having to make to accommodate their working wives and girlfriends, and some of the new expectations concerning their masculinity are causing some of them a good deal of stress, anger, and confusion. Some men are even asking the question "What does it mean to be a real man in today's world?" Many are confused about how they should treat women, whether these women are their female colleagues at work, their friends, or their wives. Some feel they are no longer "king of the castle" at home. As a result of this confusion and unhappiness, a countermovement called the men's movement has sprung up alongside the women's movement in the United States. Men in the movement seek to provide one another with the support they need to cope with the stresses and strains of being a man in today's world, and to cope with the stresses and strains brought about by the professional advances made and the personal freedoms won by women in many countries over the past few decades.

Some women view the men's movement as a backlash against the professional advances women have made and the personal freedoms they have won, as a result of the women's movement. Many men land many women, also) sec the men's movement as men's need to form a brotherhood for psychological support, just as women have formed support groups with other women. Others see the men's movement as men's attempt and need to understand more fully what it means and takes to be a "real man" at the start of the twenty-first century, when traditional definitions of manhood are changing, or are under attack in many countries around the world.

To begin this discussion of some of the catalysts for the men's movement, I'll say just a few words about why some women consider the men's movement a reaction against the women's movement-what the well-known author Susan Faludi calls the "backlash" against the women's movement. Ms. Faludi suggests that some men feel that women are becoming too independent and powerful today as a result of the professional advances they have made in the workplace and because of **the** personal freedoms they have gained in their family and personal relationships. She notes that the resentment of some men toward women's gaining power is not a recent phenomenon. More than 1,900 years ago, the women of Rome tried to repeal a law that forbade them from riding in horse-drawn chariots and from wearing multicolored dresses. In 195 B.C.E., the Roman senator Cato! expressed the fear and concern that the women of Rome had become so powerful

<sup>&#</sup>x27;Cato (cited in Susan Faludi's *Backlash: The Undeclared War Against American Women*, New York: Crown Publishers, 1991, p. 62).

that the independence of the men of Rome had been lost in their homes, and was being trampled underfoot in public. In her book titled *Backlash: The Undeclared War Against American Women*, Susan Faludi points out that many men today still resent women's progress in becoming independent personally and professionally. Faludi notes that a seven-year survey of American male attitudes in the 1980s found that no more than 5 to 10 percent of the men surveyed genuinely supported women's demands for independence and equality. It is likely that this attitude has not changed much today.

Although some women view the men's movement as a backlash, many others see the men's movement as something that is good for both men and women. They see it as men's need to form a brotherhood for psychological support to protect their rights and personal freedoms even as women formed support groups with other women to protect and advance their rights. They think, for example, that women should not automatically be given custody of children when a divorce occurs, and yet this is what often happens in the United States today. Finally, some authorities relate the development of the men's movement to the confusion created by the crisis of masculinity in contemporary society, and the many and changing images portrayed in the popular media of who and what real men are and how they are supposed to act. If you watch American movies, you might find yourself asking: Is the real man, for example, a sensitive guy like Dustin Hoffman's *Tootsiel* Is he an involved dad like Robin Williams's Mrs. Donbtfire or the father played by Steve Martin in Parenthood? A macho man like Arnold Schwarzenegger plays in *The Terminator*, or is he a caring nurturer like the man Schwarzenegger played in *Kindergarten Cop?* Many men are searching for answers to this question and are attempting to find answers from the leaders of the men's movement.

What are the origins of this crisis of masculinity that poses problems for many men today? One of the historical reasons for the crisis, according to Robert Bly, a poet who is considered to be one of the founding fathers of the men's movement, is rooted in the changes that took place in the U.S. as a result of the Industrial Revolution, which occurred in the early to mid-1900s. When the Industrial Revolution began, the kinds of work that people did (that is, the kinds of work men did changed for many Americans. Before the Civil War, 88 percent of American males were small farmers, independent artisans, or smallbusiness owners. In these professions the workers usually worked close to their homes. This meant that sons were constantly learning how to work and support themselves and their family by working alongside their fathers. By 1910, however, less then one-third of all men in the United States were self-employed. Sociologist Michael Kimmel points out that even then many men felt that the concept of manhood was being threatened (and was even vanishing) because men no longer worked their land, or had control over their labor. Many never got to see the fruits of their labor, as farmers and craftsmen usually do. Many men in the post-Industrial Revolution era had become mere cogs in the machines of industrial America. In addition, the change from a farm to an industrial society meant that instead of supporting their families by working near their homes as farmers, craftsmen, or small-business owners, the majority of men began working in factories or offices. Often the factories were far from their homes and men had to travel long distances to work. This meant that the men were not home and the amount of time fathers spent with their sons was greatly reduced. Young boys, therefore, did not have their fathers around to act as role models. The effects of the Industrial Revolution continue into the present day, according to men in the men's movement, and they want to address the problems it has brought. For example, many people are concerned that men still have little say in the upbringing of their children.

The evolution of the women's movement had a profound effect on the development of the men's movement. As a result of the women's movement, more women are working outside the home, and many men are playing a more active role in family life and they are taking on some of the tasks involved in child care and housework. Thirty to forty years ago, care of the home and children was almost exclusively the responsibility of women. In addition to these changes inside the home, in the workplace, men are today entering occupations that used to be considered women's jobs. More men are becoming nurses and teachers of young children. Other men are finding that they have more female colleagues and bosses at work than ever before, and they are having to adapt to women's styles of communication and management, which can differ considerably from those of men. At work, as well as at home, many men today in the U.S. have to play very different roles than their fathers did. As a result, they are joining with other men in the men's movement or they are reading books such as Robert Bly's Iron John to try to understand and cope with the roles expected of men in today's world.

So, some of the reasons for the men's movement can be attributed to three things: 11 the changing roles brought about by the women's movement, 2) the Industrial Revolution, and 31 men's desire to understand and affirm the concept of manhood.

Exactly what forms does the men's movement take, and what do men in the men's movement hope to achieve by being active in the movement? To begin with, the men's movement has no unified, monolithic philosophy. Although there are a number of unifying themes, there are also some interesting differences between the basic groups associated with the men's movement. Several writers who write about the men's movement have identified four basic groups of men active in the movement.

The first group is labeled the male feminists, and these men work for women's rights and equality between the sexes. Some of the men in this first group are vocal about blaming other men for much of the violence against women and for the inequality that exists between men and women in relationships and in the job market. Not all members of the men's movement, however, consider this first group of men to be an integral part of the men's movement. To be

sure, the other three groups focus more on men's issues than do the so-called male feminists.

The second orientation in the men's movement attracts men who join men's support groups to meet regularly and give and receive psychological support in deaJing with problems created by the new roles they have to play at home and at work. These men are attempting to learn to better express their feelings and emotions, and to show sensitivity without being ashamed. A third group in the men's movement consists of men who want to get back the power they feel they have lost because of the advances made by women as a result of the women's movement and feminist causes. Finally, there is an approach to the movement called the mytho-poetic men's movement. The mytho-poetic men's movement is often identified with Robert Bly, the poet who wrote one of the most well-known books of the men's movement: Iron John. The men involved in this aspect of the men's movement believe that men should be initiated into manhood as men were initiated when people still lived in small tribes and bands in ancient cultures. This group initiates men using mythology, poetry [hence the name mytho-poetic), and other rituals, such as dancing, to explore and affirm the value of masculinity and masculine approaches to problem solving. Men who subscribe to this viewpoint worry that too much contact with women and too little contact with other men has turned them into weaklings or wimps.

So, the men's movement is very diverse. A man who wants to join the movement has many options of just how he will explore the question "What does it mean to be a man in today's world?"

What do women think of the men's movement? Just as there are many different ways for men to approach the men's movement, there are many different opinions about the value and worth of the movement. Some women, especially many feminists, do not like the men's movement. They feel it is a backlash and that it is an example of how men are trying to keep women from achieving equality by forming stronger "good old boy" (or male-only) networks and by advocating women's return to their roles of housewife and mother rather than business partner or competitor. However, some women, particularly those whose husbands are part of men's support groups or who have gone on men's weekend retreats, are glad that men are learning to express their emotions and getting support from other men. Barbara Brotman reports in an article in the *Chicago Tribune* that one woman she interviewed is glad that her husband has joined the men's movement because she no longer feels that she alone is responsible for their family's emotional well-being. She and her husband now share that role and responsibility.

This lecture has been only a brief introduction to some of the issues related to the men's movement. Because of many different perceptions concerning the goals and purpose of the movement, it is difficult to give a simple definition or draw a simple portrait of the movement. Perhaps it would be better to say the men's movement is like a tree with many branches and many roots. The movement is

much younger than the women's movement, but in one form or another it is beginning to have substantial impact on many men and women, as they try to adapt to their changing roles in American society in the twenty-first century.

### Chapter6 The Men's Movement: What Does It Mean to Be a Man7

## **Q** B. Listening and Notetaking Script

The women's movement has gained a lot of attention in recent years in the U.S., and in countries around the world, as you heard in the last lecture. The women's movement has inspired many women to fight for equal rights and treatment in their homes, their personal relationships, and at work. It has also forced many women to **examine** and to rethink the roles they play in society. However, not only have women begun to examine and rethink the roles they play at home and work, and in modem society as a whole, but men also have begun to examine and rethink the roles they play in society, and to examine and rethink the various and changing roles they must play at home and work today.

Men have also begun to react in both positive and negative ways to the new expectations they must meet at home and work. Some men are adjusting well to the new roles they must playas more and more women enter the job market, and some men are pleased that their wives and partners have jobs outside the home. However, some of the role changes men are having to make to accommodate their working wives and girlfriends, and some of the new expectations concerning their masculinity are causing some of them a good deal of stress, anger, and confusion. Some men are even asking the question "What does it mean to be a real man in today's world!" Many are confused about how they should treat women, whether these women are their female colleagues at work, their friends, or their wives. Some feel they are no longer "king of the castle" at home. As a result of this confusion and unhappiness, a countermovement called the men's movement has sprung up alongside the women's movement in the United States. Men in the movement seek to provide one another with the support they need to cope with the stresses and strains of being a man in today's world, and to cope with the stresses and strains brought about by the professional advances made and the personal freedoms won by women in many countries over the past few decades.

All **right**, let's take a break. Have you noticed that you're listening and **taking** notes for longer and longer periods of **time**? It takes a lot of concentration to do **this**, but you need to develop the ability to listen and take notes if you intend to listen to lectures at an **English-speaking** university. Let's see how you did on the initial section of the lecture.

The lecturer began by remarking that the women's movement inspired many women to **fight** for equal rights at work, in their personal relationships, and where **else?** (pause) Right, at work. At

the same time, women have had to rethink the roles-and the changing roles-they play at home and at work. The **lecturer** then suggests that men, too, have had to examine and rethink the roles they must play at home and at work. Men have adjusted to the new roles they have to play. But it has not been easy for some men who must take on new roles as **their** wives and girlfriends have begun to work outside the home. The **threat** to **their** masculinity is making many men stressed, angry, and confused. The lecturer noted that some men are asking the question, "What does it mean to be a man in today's wotldl" and many don't know the answer to this question. Do you remember the reference to the man's castlel How did you note down the fact that men are concerned that they are no longer "king of the castle," and this fact makes them confused and unhappyl For this reason, men in the United States began the men's movement to give and get support. The support helps them cope with the stresses and strains that have occurred since women have made professional advances and gained freedoms throughout the world. OK. Were you able to write down a few phrases that would help you rewrite the information with correctly spelled words at a later timet OK. Let's go on to the **next** part.

Some women view the men's movement as a backlash against the professional advances women have made and the personal freedoms they have won, as a result of the women's movement. Many men land many women, also) see the men's movement as men's need to form a brotherhood for psychological support, just as women have formed support groups with other women. Others see the men's movement as men's attempt and need to understand more fully what it means and takes to be a "real man" at the start of the twenty-first century, when traditional definitions of manhood are **changing**, or are under attack in many countries around the world.

What words, phrases-and I hope they were abbreviated-or notations did you write down to capture the attitudes toward the men's movement! I'll repeat the critical ideas, and you check your notes. The speaker said that many women view the movement as a backlash. Some men and women view it as men's need to form a brotherhood for psychological support-like women did with their movement. Others view it as an attempt to better understand what itmeans and takes to be a "real" man-when traditional definitions of what it means to be a man are changing or under attack. Let's return to the lecture as the speaker begins to discuss some of the reasons for (or the catalysts for) the men's movement. The lecturer Will speak for a longer amount of time than he has up until now. Are you ready for a long stretch of notetakingi

To begin this discussion of some of the catalysts for the men's movement, I'll say a few words about why some women consider the men's movement a reaction against the women's movement-what the well-known author Susan Faludi calls the "backlash" against the women's movement. Ms. Faludi suggests that some men feel that

women are becoming too independent and powerful today as a result of the professional advances they have made in the workplace and because of the personal freedoms they have gained in their family and personal relationships. She notes that the resentment of some men toward women's gaining power is not a recent phenomenon. More than 1,900 years ago, the women of Rome tried to repeal a law that forbade them from riding in horse-drawn chariots and from wearing multicolored dresses. In 195 B.C., the Roman senator Cato expressed the fear and concern that the women of Rome had become so powerful that the independence of the men of Rome had been lost in their homes, and was being trampled underfoot in public. In her recent book titled Backlash: The Undeclared War Against American Women, Susan Faludi points out that many men today still resent women's progress in becoming independent personally and professionally. Faludi notes that a seven-year survey of American male attitudes in the 1980s found that no more than 5 to 10 percent of the men surveyed genuinely supported women's demands for independence and equality. It is likely that this attitude has not changed much today.

Although some women view the men's movement as a backlash, many others see the men's movement as something that is good for both men and women. They see it as men's need to form a brotherhood for psychological support to protect their rights and personal freedoms even as women formed support groups with other women to protect and advance their rights. They think, for example, that women should not automatically be given custody of children when a divorce occurs, and yet this is what often happens in the United States today. Finally, some authorities relate the development of the men's movement to the confusion created by the crisis of masculinity in contemporary society, and the many and changing images portrayed in the popular media of who and what real men are and how they are supposed to act. If you watch American movies, 'you might find yourself asking: Is the real man, for example, a sensitive guy like Dustin Hoffman's Tootsiel Is he an involved dad like Robin Williams's Mrs. Doubtfire or the father played by Steve Martin in Parenthood? A macho man like Arnold Schwarzenegger plays in *The Terminator*, or is he a caring nurturer like the man Schwarzenegger played in Kindergarten Copt Many men are searching for answers to this question and are attempting to find answers from the leaders of the men's movement.

The lecturer started off by listing some of the catalysts for the men's movement and why women view the movement as a reaction against the women's movement. Some men feel that women are too independent and powerful today as a result of professional advances they have made and the personal freedoms they have won. Resentment against women is not new, the speaker said. In ancient Rome, for example, more than 1,900 years ago, women were forbidden from riding in horse-drawn chariots and from wearing multicolored dresses, and they tried to have these laws repealed. The author Susan Paludi, in her book titled Backlash: The Undeclared War Against American Women, believes that

many men today resent women's personal and professional independence. She claims in her book that no more than 5 to 10 percent of the men **surveyed** genuinely support women's demands for independence and equality.

At this point, the lecturer changes from talking about the phenomenon of backlash to describing (1) how the movement functions as psychological support for men equivalent to the support women have received from the women's movement, and (2) how the movement helps men cope with the confusion created by the changing images of men in popular movies, like Mrs. Doubtfire, The Terminator, and Kindergarten Cop. Did you write down the types of movies these atel Let's now finish the lecture. You will take notes without any assistance given for this next and final segment of the lecture. Ready!

What are the origins of this crisis of masculinity that poses problems for many men today? One of the historical reasons for the crisis, according to Robert Bly, a poet who is considered to be one of the founding fathers of the men's movement, is rooted in the changes that took place in the U.S. as a result of the Industrial Revolution, which occurred in the early to mid-1900s. When the Industrial Revolution began, the kinds of work that people did (that is, the kinds of work men did) changed for many Americans. Before the Civil War, 88 percent of American males were small farmers, independent artisans, or small-business owners. In these professions the workers usually worked close to their homes. This meant that sons were constantly learning how to work and support themselves and their family by working alongside their fathers. By 1910, however, less then one-third of all men in the United States were self-employed. Sociologist Michael Kimmel points out that even then many men felt that the concept of manhood was being threatened (and was even vanishing) because men no longer worked their land, or had control over their labor. Many never got to see the fruits of their labor, as farmers and craftsmen usually do. Many men in the post-Industrial Revolution era had become mere cogs in the machines of industrial America. In addition, the change from a farm to an industrial society meant that instead of supporting their families by working near their homes as farmers, craftsmen, or small-business owners, the majority of men began working in factories or offices. Often the factories were far from their homes and men had to travel long distances to work. This meant that the men were not home and the amount of time fathers spent with their sons was greatly reduced. Young boys, therefore, did not have their fathers around to act as role models. The effects of the Industrial Revolution continue into the present day, according to men in the men's movement, and they want to address the problems it has brought. For example, many people are concerned that men still have little say in the upbringing of their children.

The evolution of the women's movement had a profound effect on the development of the men's movement. As a result of the

women's movement, more women are working outside the home, and many men are playing a more active role in family life and they are taking on some of the tasks involved in child care and housework. Thirty to forty years ago, care of the home and children were almost exclusively the responsibility of women. In addition to these changes inside the home, in the workplace, men are today entering occupations that used to be considered women's jobs. More men are becoming nurses and teachers of young children. Other men are finding that they have more female colleagues and bosses at work than ever before, and they are having to adapt to women's styles of communication and management, which can differ considerably from those of men. At work, as well as at home, many men today in the U.S. have to play very different roles than their fathers did. As a result, they are joining with other men in the men's movement or they are reading books such as Robert Bly's Iron John to try to understand and cope with the roles expected of men in today's world.

So, some of the reasons for the men's movement can be attributed to three things: 11 the changing roles brought about by the women's movement, 2) the Industrial Revolution, and 3) men's desire to understand and affirm the concept of manhood.

Exactly what forms does the men's movement take, and what do men in the men's movement hope to achieve by being active in the movement? To begin with, the men's movement has no unified, monolithic philosophy. Although there are a number of unifying themes, there are also some interesting differences between the basic groups associated with the men's movement. Several writers who write about the men's movement have identified four basic groups of men active in the movement.

The first group is labeled the male feminists, and these men work for women's rights and equality between the sexes. Some of the men in this first group are vocal about blaming other men for much of the violence against women and for the inequality that exists between men and women in relationships and in the job market. Not all members of the men's movement, however, consider this first group of men to be an integral part of the men's movement. To be sure, the other three groups focus more on men's issues than do the so-called male feminists.

The second orientation in the men's movement attracts men who join men's support groups to meet regularly and give and receive psychological support in dealing with problems created by the new roles they have to play at home and at work. These men are attempting to learn to better express their feelings and emotions, and to show sensitivity without being ashamed. A third group in the men's movement consists of men who want to get back the power they feel they have lost because of the advances made by women as a result of the women's movement and feminist causes. Finally, there is an approach to the movement called the mytho-poetic men's movement. The mytho-poetic men's movement is often identified with Robert Bly, the

poet who wrote one of the most well-known books of the men's movement: *Iron John*. The men involved in this aspect of the men's movement believe that men should be initiated into manhood as men were initiated when people still lived in small tribes and bands in ancient cultures. This group initiates men using mythology, poetry (hence the name mytho-poetic], and other rituals, such as dancing, to explore and affirm the value of masculinity and masculine approaches to problem solving. Men who subscribe to this viewpoint worry that too much contact with women and too little contact with other men has turned them into weaklings or wimps.

So, the men's movement is very diverse. A man who wants to join the movement has many options of just how he will explore the question "What does it mean to be a'man in today's world?"

What do women think of the men's movement? Just as there are many different ways for men to approach the men's movement, there are many different opinions about the value and worth of the movement. Some women, especially many feminists, do not like the men's movement. They feel it is a backlash and that it is an example of how men are trying to keep women from achieving equality by forming stronger "good old boy" (or male-only) networks and by advocating women's return to their roles of housewife and mother rather than business partner or competitor. However, some women, particularly those whose husbands are part of men's support groups or who have gone on men's weekend retreats are glad that men are learning to express their emotions and getting support from other men. Barbara Brotman reports in an article in the *Chicago Tribune* that one woman she interviewed is glad that her husband has joined the men's movement because she no longer feels that she alone is responsible for their family's emotional well-being. She and her husband now share that role and responsibility.

This lecture has been only a brief introduction to some of the issues related to the men'smovement. Because of many different perceptions concerning the goals and purpose of the movement, it is difficult to give a simple definition or draw a simple portrait of the movement. Perhaps it would be better to say the men's movement is like a tree with many branches and many roots. The movement is much younger than the women's movement, but in one form or another it is beginning to have substantial impact on many men and women, as they try to adapt **to** their <u>changing</u> roles in American society in the twenty-first century.

Well, bow did you dot Take the time to check your notes with a classmate. Look at your notes and present the information in the final section of the lecture to him or bet. Share the task. You present the information in one segment of the lecture, and then allow your classmate to present the information in the next section. If you missed any of the information, you will bave an opportunity to complete your notes as you listen to your classmate.

**Unit Four** 

### **Communication:**

The Influence of Language, Culture, and Gender

Chapter 7 Classroom Communication: Language and Culture in the Classroom

## **A**. Orientation Listening Script

Today's lecture deals with the topic of language, culture, and communication in classrooms in the United States. Samovar and Porter, in their book Intercultural Communication, define communication as a form of human behavior that results from a need to interact with other human beings. As a result of this need, we send verbal and nonverbal messages to communicate with both friends and strangers. Communication can take the form of talk, or it can take the form of gestures, or nonverbal signals, of one kind or another. The talk or signals send messages that communicate a person's thoughts, feelings, and intentions to others. Many scholars study the topic of communication, in general, and speech communication, specifically, in order to learn how individuals send and interpret messages. A number of these scholars conduct research on the topic of intercultural communication. That is, they study communication between people from different cultures. One area of research in intercultural communication is the study of the influence of the setting, or environment, on the success and/or failure of communication. In this lecture, I will be talking about one specific aspect of intercultural communication; that is, intercultural communication that takes place in the classroom. This information is taken from a book chapter written by Janis Andersen and Robert Powell tided "Intercultural Communication and the Classroom." It appeared in Samovar and Porter's edited book Intercultural Communication.

When you are asked to picture a classroom in your mind's eve, what do you see? You probably see a classroom that is familiar to you and that would be familiar to students from your culture. However, not everyone will see the same picture in their minds. Although many people have similar images of what a classroom looks like in their mind's eye, their culture greatly influences the way they view the teacher-student relationship, and culture also influences how a person understands the ways in which information is taught and learned in the classroom. Culture also plays an important role in determining how teachers and students communicate in the classroom. In this lecture, I'll give you a few examples of some of the ways that culture affects this communication. The "classroom" as we know it, by the way, is a relatively recent innovation, according to Janis Andersen and Robert Powell. Great teachers like Socrates, Plato, Aristotle, and Confucius taught without the benefit of a board, chalk, desks, and the standard comforts lor discomforts) of a classroom building. But let me return to the main topic of this lecture-the influence of culture on behavior and communication between teacher and students in the classroom.

If you have come from another **culture** to study in the United States, you may already have noticed that teachers and students in American universities interact and communicate in the classroom in ways that differ from how teachers and students communicate in your home culture. **It's culture** that influences and establishes these **interac**tions and communication patterns. Of course, culture is a term that is used in many different ways. Basically, culture provides us with a system of knowledge that allows us to communicate with others and **teaches** us how to interpret their verbal and nonverbal behavior. Culture influences and establishes how people interact with one another (or do not interact with one another). In particular, culture influences the rituals that take place in the classroom **setting**, and it influences the ways that students participate in the classroom discourse. It also influences the esteem in which teacliers are held.

Just what **exactly** are "rituals"? I'll give you a dictionary definition to begin with. "Rituals" are systematic procedures used to perform a certain act or to cominunicate a certain message. Well, there are many rituals associated with teaching and **learning**, and education in general. Rituals are systematic procedures used to perform a certain act or to communicate a certain message. In some countries, when a teacher enters the classroom, the students ritually stand up. In the United States, a classroom ritual occurs when a student raises her hand to signal to the teacher that she knows the answer to a question. This is not a universal classroom ritual to signal intent to answer a question, however. Jamaican students snap or flap their fingers to signal that they want to answer a question that has been posed. In some college- and graduate-level seminars in American universities, students do not make any physical signs when they want to speak; they state their ideas whenever **they** feel the urge or when it is appropriate. This sort of classroom behavior is especially confusing to students from cultures in which there are no rituals for attracting the teacher's attention because the student is not expected to participate in the class at all.

This **brings** us to the **issue** of classroom participation. North American students of European origin are usually more talkative in class and more willing to state their opinions than students of Native American heritage or from Asian backgrounds. This difference is directly related to cultural values about learning and education, and classroom behavior. Euro-American students' culture **teaches** them that learning is shaped and helped by their talk and active engagement in exploring or discussing issues. **Asian** students, however, are generally taught that they will learn best by listening to and absorbing the knowledge being given to them by the teacher. In their article, Andersen and Powell point out that some cultures do not have a way for students to signal a desire to talk to a teacher; in these cultures, students speak out only after the teacher has spoken to them. Most classroom interaction in Vietnam is tightly controlled by the **teacher**, according to Andersen and Powell.

The esteem in which teachers are held also varies from culture to culture. According to researchers Samovar and Porter, the Vietnamese have a great deal of respect for their instructors and consider them to be honored members of society. The Vietnamese and many other Asian peoples see the teacher, the instructor, and the professor as the very "symbol" of learning and culture. In Germany, students value the personal opinions of their instructors and it is not customary to disagree with or contradict a teacher during class. Israeli students, on the other hand, can criticize an instructor if they feel that he or she is wrong about an issue or who they believe has provided incorrect information, according to Samovar and Porter.

There are many other ways that culture can affect interaction and communication between teachers and students in the classroom. I have discussed differences in how students get the teacher's attention during class, and I've pointed out the differences in the ways students from various cultures participate and communicate with the teacher during class. From this brief consideration of classroom communication, you should begin to see that **learning** a language involves more than studying the vocabulary, idioms, and the grammar of the language. If you are to succeed in communicating in a second-language classroom, you need to learn not only the language spoken in the classroom, but also the expected procedures of classroom participation and communication-that is, the rituals of language, culture, and communication.

### Chapter 7 Classroom Communication: Language and Culture in the Classroom

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and that would be familiar to **students from** your culture. However, not everyone will see the same picture in their minds. Although many people have similar images of what a classroom looks like in their mind's eye, **their** culture greatly influences the way they view the teacher-student relationship, and culture also influences how a person understands the .ways in which information is taught and learned in the classroom. Culture also plays an important role in determining how teachers and students communicate in the classroom. In this lecture. I'll give you a few examples of some of the ways that culture affects this communication. The "classroom" as we know it, by the way, is a relatively recent innovation, according to Janis Andersen and Robert Powell. Great teachers like Socrates, Plato, Aristotle, and Confucius taught without the benefit of a board, chalk, desks, and the standard comforts (or discomforts) of a classroom building. But let me return to the **main** topic of **this lecture—the** influence of culture on behavior and communication between **teacher** and students in the classroom...

Let's take a **brief break from listening** and tiotetaking to check: your **notes** and give you an **opportunity** to see how you're doing so far. I'll **limit** my **mentoring** to providing **an** outline of **the** lecture and asking a few **questions** that you should **be** able to **answer** by **looking in** your **notes**.

**The** speaker **opened the lecture** with a **definition** of **the term** communication. Check your notes. Can you define the term? You don't have to define it in the exact words the speaker used; you can paraphrase slightly as long as you can provide a definition of the **term** that **captures the** meaning **given** by **Samovar** and Porter. Did you note **their names**, even if you **didn't** get the spelling correct? (pause) 9K. The speaker next mentioned why people communicate-they have a need to interact with other human beings and how they communicate—with verbal and nonverbal messages. Is there anything else you included in your notes about the first few points made by the lecturer? (pause) OK. What did the lecturer discuss next! It involved the research of speech communication **scholars** and what **some** of **them** study. What do some of these speech communication scholars study? Right. Intercultural communication and, more specifically, the influence of the communication setting (for **example**, the classroom) and the success and/or the failure of the communication. At this point, the lecturer started to get more specific about the kind of intercultural communication he would be dealing with. Check your notes. What was it? I'm confident that you can answer that question. Let me continue. The next topic dealt with was the classroom and culture. The **speaker** began **this** section of the lecture asking you to get a picture in your mind's eye of a classroom. Did you note thist Why or why not? What was the point of using the mental-picture technique! You have to decide what you don't need to take down in your notes, and this example was something that could have been **omitted**, but **the** important **point** of why it was used **should** 

have found its way into your notes. Can you find the answer to this question in your notes? Let's return to the lecture.

If you have come from another culture to study in North America, you may already have noticed that teachers and students in American universities interact and communicate in the classroom in ways that differ from how teachers and students communicate in your home culture. It's culture that influences and establishes these interactions and communication patterns. Of course, culture is a term that is used in many different ways. Basically, culture provides us with a system of knowledge that allows us to communicate with others and teaches us how to interpret their verbal and nonverbal behavior. Culture influences and establishes how people interact with one another (or do not interact with one another). In particular, culture influences the rituals that take place in the classroom **setting**, and it influences the ways that students participate in the classroom discourse. It also influences the esteem in which teachers are held.

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This brings us to the issue of classroom participation. North American students of European origin are usually more talkative in class and more willing to state their opinions than students of Native American heritage or from Asian backgrounds. This difference is directly related to cultural values about learning and education, and classroom behavior. Euro-American students' culture teaches them that learning is shaped and helped by their talk and active engagement in exploring or discussing issues. Asian students, however, are generally taught that they willieam best by listening to and absorbing the knowledge being given to them by the teacher. In their article, Andersen and Powell point out that some cultures do not have a way for students to signal a desire to talk to a teacher; in these cultures, students speak out only after the teacher has spoken to them. Most classroom interaction in Vietnam is tightly controlled by the teacher, according to Andersen and Powell.

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**Now,** let me mention the main topics of the section of the lecture that you just heard. Check your notes to be sure that you have written **down** this information.

- 1. Classroom rituals-ean you define the term ritual? Can you give the examples of rituals that were mentioned/
- 2. Classroom participation-can you describe the differences that have been observed between Buro-American and Asian students' participation in **class?** Are you using your memory or your notes to answer the question/ What did the lecturer say about Vietnamese classroom participation patterns/
- 3. The esteem in which teachers are held. Look at your notes and see whether you can summarize the information presented about this topic.

Finally, what was the last topic dealt with? Did you write it down and can you decode the notes you took to reconstruct the information/ If you can, you're making progress in developing your listening comprehension and notetaking skills.

### **Unit Four**

### **Communication:**

The Influence of Language, Culture, and Gender

Chapter 8

Gender and Communication: Male-Female Conversation as Cross-cultural Communication

## A. Orientation Listening Script

In the **last** lecture, you heard about the relationship between culture and **classroom** communication. In this lecture, I'll talk about another variable that **affects** human communication. That variable is gender. Gender is the social identity that men and women learn as they grow up in **a** culture. For example, boys learn to be "masculine" and girls learn to be "feminine" as they grow to be men and women. Researchers have shown that men and women (and boys and girls, for that matter) communicate in quite different ways and in **different** amounts, depending on the situation the speakers find themselves in, and the reason or reasons they're communicating with other people.

Many cultures actually encourage men and women to talk differendy and in different amounts, and these patterns for communicating are learned when men and women are young boys and girls. Children learn how to talk to other children or adults, and how to have conversations, not only from their parents, but also from their peers-other boys and girls their age. In her best-selling book, You Just Don't Understand, Deborah Tannen points out that although American boys and girls often play together, they spend *most* of their time playing in same-sex groups. She also points out that boys and girls do play some games together, but their favorite games are very often quite different. Tannen and other researchers on this topic have found that young boys, say ages eight through twelve tend to play outside the home rather than in, and they play in large groups that are hierarchically structured. The group of boys generally has a leader who tells the other boys what to do and how to do it. It is by giving orders and making the other boys play by the rules that boys achieve higher and more dominant status in the play group. Boys also achieve status by taking "center stage." They take center stage by talking a lot; they give orders and commands; they tell a lot of stories and jokes. They command attention by dominating conversations and by interrupting other boys who are speaking. The researchers also found that boys' games often have clear winners and losers and elaborate systems of rules.

Researchers found that girls play different kinds of games and abide by different rules when playing their game. In addition, girls in groups use different patterns of communication and different styles of communication when playing together. Tannen and her colleagues have found that young girls often play in small groups or in pairs. They play less often in large groups or teams outside the home. Girls' play is not so hierarchically ordered as boys' play is. In their most frequent games, like hopscotch and jump rope, every girl gets **a** chance to play. In many of their play activities, such as playing house, there are no "winners" or "losers." Researchers have also found that girls usually don't give many direct orders or commands to their playmates; they express their preferences as suggestions, according to Tannen. Girls often say to their playmates, "Let's do this ... or that." Boys, on the other hand, are

more direct in ordering their playmates to do this or that. Tannen is quick to point out that North American boys as well as girls want to get their way and want other children to do what they want them to do; however, boys and girls try to get their playmates to do what they want them to do in different ways.

Another well-known researcher, **Marjorie** Harness Goodwin, compared boys and girls engaged in two task-oriented activities. The boys were making slingshots in preparation for a fight. The girls were making jewelry; they were making rings for their fingers. Goodwin noted that the boys' activity group was hierarchically arranged. The "leader" told the other boys what to do and how to do it. The girls making the rings were more egalitarian. Everyone made suggestions about how to make the rings, and the girls tended to listen and accept the suggestions of the other girls in the group.

Goodwin is not suggesting that girls never engage in some of the communication and management behaviors boys engage in. In fact, in another study, she found that when girls play house, the girl who plays the mother gives orders to the girls who play the children. Girls seem to give orders to their peers less often than boys do when they play. The girls are practicing parent--child relationships in the game of playing house. It's very likely that when little boys play their games, they are also practicing the masculine roles they're expected to assume when they grow up.

**As** a result of our cultural <u>upbringing</u>, we learn norms of behavior and patterns of communication that are often gender based, and sometimes gender biased. We also develop stereotypes about how and how much males and females-that is, boys and girls or women and menshould, and do communicate. However, researchers have shown that many of these stereotypes actually turn out to be quite wrong.

A common stereotype that many people hold is the idea that women talk a lot, perhaps too much, and that they are always interrupting or trying to get "center stage" when someone else is talking. There is, in fact, a proverb that reinforces this idea. It states that "foxes are all tail and women are all tongue." Actually, recent research on the influence of gender on communication has shown the exact opposite to be true in many instances!

Researchers have found that men usually produce more talk than women and are more likely to interrupt another speaker than women will-particularly in public settings, such as business meetings. So although women are believed to talk more than men, study after study has shown that it is men who talk more at meetings, in mixed-group discussions, and in classrooms where girls or young women sit next to boys or young men. And this finding holds even for communicative interactions between very educated and successful professional men and women, such as professors, for example. Deborah Tannen, in her book You *Just Don't Understand*, cites a study conducted by Barbara and Gene Eakins, who tape-recorded and studied seven university faculty meetings. They found that, with one exception, men professors spoke more often and, without exception, for a

longer period of time than the women professors did. The men took center stage and talked from 10.66 seconds to 17.07 seconds, while the women talked from 3 to 10 seconds, on the average. Tannen points out that the women's longest turns were still shorter than the men's shortest turns. Angela Simeone reports another example of this phenomenon in her book, *Academic Women*. She found that women professors talk at departmental meetings less often than their male colleagues do. When asked how often they spoke at departmental meetings, 46 percent of the American men professors reported that they spoke often at these meetings, but only 15 percent of the women professors reported that they spoke often at departmental meetings.

Perhaps it is our social concept of what is feminine and what is masculine that reinforces the stereotype that women talk more than men, and even causes these different patterns of communication. Maybe a woman is labeled talkative or is criticized for interrupting if she does these things at all, because our culture-as well as many cultures-teaches that women should be quiet if they want to be "feminine." Perhaps masculine culture encourages boys and men to dominate talk and to interrupt more often, and males who talk a lot and interrupt often are not criticized for doing so. These differences in the patterns of communication and styles of communicating are studied by researchers who study the effects of gender on communication. They study these effects in order to understand why misunderstandings occur between men and women in conversation. Often, it's because their styles and patterns of conversation are so different. It is important that we learn to recognize these differences so that we can learn to communicate better with people of the other gender. It is important to emphasize that these differences may be specific to North American culture. Gender can affect communication in even more and stronger ways in some other cultures. In Zulu culture, for example, a wife is forbidden to say any words that sound like the names of her father-in-law or brothers. This means that she must paraphrase these words, and she is expected to do so.

So you see, cultural differences are not the only things that affect language and communication. Language is affected by gender as well. I'm sure you can think of many ways that gender affects communication between men and women in your own culture.

## Chapter8 Gender and Communication: Male-Female Conversation as Cross-cultural Communication

## B. Listening and Notetaking Script

In the last lecture, you heard about the relationship between culture and classroom communication. In this lecture, **I'll** talk about another variable that affects human communication. That variable is gender. Gender is the social identity that men and women learn as they grow up in a culture. For example, boys learn to be "masculine" and girls

learn to be <u>"feminine"</u> as they grow to be men and women. Researchers have shown that men and women land boys and girls, for that matter) communicate in quite diHerent ways and in diHerent amounts, depending on the situation the speakers find themselves in, and the reason or reasons they're communicating with other people.

Many cultures actually encourage men and women to talk differently and in diHerent amounts, and these patterns for communicating are learned when men and women are young boys and girls. Children learn how to talk to other children or adults, and how to have conversations, not only from their parents, but also from their peers-other boys and girls their age. In her best-selling book, You Just Don't Understand, Deborah Tannen points out that although American boys and girls often play together, they spend *most* of their time playing in same-sex groups. She also points out that boys and girls do play some games together, but their favorite games are very often quite diHerent. Tannen and other researchers on this topic have found that young boys, say ages eight through twelve tend to play outside the home rather than in, and they play in large groups that are hierarchically structured. The group of boys generally has a leader who tells the other boys what to do and how to do it. It is by giving orders and making the other boys play by the rules that boys achieve higher and more dominant status in the play group. Boys also achieve status by taking "center stage." They take center stage by talking a lot; they give orders and commands; they tell a lot of stories and jokes. They command attention by dominating conversations and by interrupting other boys who are speaking. The researchers also found that boys' games often have clear winners and losers and elaborate systems of rules. .

Researchers found that.girls play diHerent kinds of games and abide by different rules when playing their game. In addition, girls in groups use diHerent patterns of communication and diHerent styles of communication when playing together. Tannen and her colleagues have found that young girls often play in small groups or in pairs. They play less often in large groups or teams outside the home. Girls' play is not so hierarchically ordered as boys' play is. In their most frequent games, like hopscotch and jump rope, every girl gets a chance to play. In many of their play activities, such as playing house, there are no "winners" or "losers." Researchers have also found that girls usually don't give many direct orders or commands to their playmates; they express their preferences as suggestions, according to Tannen. Girls often say to their playmates, "Let's do this ... or that." Boys, on the other hand, are more direct in ordering their playmates to do this or that. Tannen is quick to point out that North American boys as well as girls want to get their way and want other children to do what they want them to do; however, boys and girls try to get their playmates to do what they want them to do in different ways.

Another well-known researcher, Marjorie Harness Goodwin, compared boys and girls engaged in two task-oriented activities. The boys were making slingshots in preparation for a fight. The girls were mak-

ing jewelry; they were making rings for their fingers. Goodwin noted that the boys' activity group was hierarchically arranged. The "leader" told the other boys what to do and how to do it. The girls making the rings were more egalitarian. Everyone made suggestions about how to make the rings, and the girls tended to listen and accept the suggestions of the other girls in the group.

Goodwin is not suggesting that girls never engage in some of the communication and management behaviors boys engage in. In fact, in another study, she found that when girls play house, the girl who plays the mother gives orders to the girls who play the children. Girls seem to give orders to their peers less often than boys do when they play. The girls are practicing parent-child relationships in the game of playing house. It's very likely that when little boys play their games, they are also practicing the masculine roles they're expected to assume when they grow up.

*In this portion of the lecture, the lecturer dealt with two major* topics and a number of subtopics. She began talking about two things that influence gender and communication: the fact that gender is learned, and the fact that men and women learn to communicate in different ways and amounts, depending on the situation and the reason for talking or communicating. Next, the lecturer talked about Tannen's observations concerning children's communication patterns at play. What examples did she give that showhow boys and girls play differently! How did you list these differences **in** your notes! (pause) The listing doesn't have to be as complete as the **outline** you looked at the **first** time you **heard** the lecture. Finally, did you have a chance to write down some information about the **Goodwin** study, which compared boys **making** weapons for a fight with girls playing house! Check your notes, and if you want to add any information, go ahead and add it in note form. Let's continue. The speaker takes up the topic of stereotypes-sometimes mistaken- about gender and communication in the next part of the lecture and talks about the results of a research study by **Eakins** and **Eakins**. Are you ready to continue **listening** and developing your **notetaking** abilities!

**As** a result of our cultural upbringing, we learn norms of behavior and patterns of communication that are often gender based, and sometimes gender biased. We also develop stereotypes about how and how much males and females-that is, boys and girls or women and menshould, and do communicate. However, researchers have shown that many of these stereotypes actually turn out to be quite wrong.

A common stereotype that many people hold is the idea that women talk a lot, perhaps too much, and that they are always interrupting or trying to get "center stage" when someone else is talking. There is, in fact, a proverb that reinforces this idea. It states that "foxes are all tail and women are all tongue." Actually, recent research on the influence of gender on communication has shown the exact opposite to be true in many instances!

Researchers have found that men usually produce more talk than women and are more likely to interrupt another speaker than women will-particularly in public settings, such as business meetings. So although women are believed to talk more than men, study after study has shown that it is men who talk more at meetings, in mixed-group discussions, and in classrooms where girls or young women sit next to boys or young men. And this finding holds even for communicative interactions between very educated and successful professional men and women, such as professors, for example, Deborah Tannen, in her book You Just Don't Understand, cites a study conducted by Barbara and Gene Eakins. who tape-recorded and studied seven university faculty meetings. They found that, with one exception, men professors spoke more often and, without exception, for a longer period of time than the women professors did. The men took center stage and talked from 10.66 seconds to 17.07 seconds, while the women talked from 3 to 10 seconds, on the average. Tannen points out that the women's longest turns were still shorter than the men's shortest turns. Angela Simeone reports another example of this phenomenon in her book, Academic Women. She found that women professors talk at departmental meetings less often than their male colleagues do. When asked how often they spoke at departmental meetings, 46 percent of the American men professors reported that they spoke often at these meetings, but only 15 percent of the women professors reported that they spoke often at departmental meetings.

Perhaps it is our social concept of what is feminine and what is masculine that reinforces the stereotype that women talk more than men, and even causes these different patterns of communication. Maybe a woman is labeled talkative or is criticized for interrupting if she does these things at all, because our culture-as well as many cultures-teaches that women should be quiet if they want to be "feminine." Perhaps masculine culture encourages boys and men to dominate talk and to interrupt more often, and males who talk a lot and interrupt often are not criticized for doing so. These differences in the patterns of communication and styles of communicating are studied by researchers who study the effects of gender on communication. They study these effects in order to understand why misunderstandings occur between men and women in conversation. Often, it's because their styles and patterns of conversation are so different. It is important that we learn to recognize these differences so that we can learn to communicate better with people of the other gender. It is important to emphasize that these differences may be specific to North American culture. Gender can affect communication in even more and stronger ways in some other cultures. In Zulu culture, for example, a wife is forbidden to say any words that sound like the names of her father-in-law or brothers. This means that she must paraphrase these words, and she is expected to do so.

So you see, cultural differences are not the only things that affect language and communication. Language is affected by gender as well. I'm sure you can think of many ways that gender affects communication between men and women in your own culture.

Let me sum up the major points made in this final part of the lecture for your note check. The lecturer noted that a common stereotype is that women talk a lot-too much, in fact. However, research shows that men actually talk more-especially in public settings. The lecturer made reference to the research study that showed that even men and women professors engaged in different patterns and amounts of talk during faculty meetings. Did you note the statistics that demonstrate that men professors talked longer and more often than women professors! Did that fact surprise you! There were several authors mentioned during this part of the lecture. How did you handle taking notes on the names that were used! It is likely that you'll have to review your notes after a lecture and fill in what you have missed. Names may prove to be a problem for your notetaking, but practice will help you develop familiarity with the sound and pattern of names used in references. Let me repeat the title of the books the lecturer mentioned: Tannen's You Just Don't Understand and Simeone's Academic Women.

Finally, can you tell me-from looking at your notes-what information the lecturer ended the lecture with! Well, it has something to do with the different social concept of what feminine and masculine are in our society-or should I say "societies"! We need to understand why men and women talk more or less, and what makes them talk more or less. We need to understand that culture dictates how, why, and when men and women communicate as they do-or as they don't. Take the Zulu culture, for example. Take my culture or your culture, for example. But that is a topic for another day and another lecture.

### **Unit Five**

### **Biology:**

## **Understanding Genetics to Genetic Engineering**

### Chapter 9 The Origins of Heredity: Mendel and the Garden Pea Experiment

## A. Orientation Listening Script

I'd like to begin today's lecture by asking a few simple questions. Why do people look different from cats, from horses, and from birds? Why do people look different from each **other?** Why do you look different from your sister or brother? The answer to all these questions lies in the genes of people and animals. Your genes provide biological instructions that control how you look, how you function, and even partly how you behave. Genes determine how every living creature on earth appears, how it functions, how it reproduces, and, generally, how it behaves.

Now, genes are found inside the cells of the body, and are passed down, or inherited, from one generation to the next. You may, for example, have inherited the color of your hair from your mother, or the ability to roll your tongue from your father. Or you may have inherited some other interesting trait you mayor may not be grateful for from your great, great, great grandfather or grandmother. Who knows! Inherited traits (or abilities) are determined by combinations of genes that are different for every human being. Although each individual is really quite unique, it's interesting to note that most genes are common to every person on Earth. In fact, humans share many of the same genes with other kinds or species of animals, from the simple, little fruit fly to our close cousin, the apes. Do you realize that the small African ape, called the Bonobo, shares 97 percent of the same genes we have! I don't know whether that's good news or not for us-or for the Bonobos.

The study of genes is a branch of the field of biology called genetics, and the scientists who study how genes are inherited and passed from one generation to the next are called geneticists. The field of genetics actually dates back to the mid-1800s, but most of what we know today about genes (and about genetic disorders has been learned in only the last few decades.

But don't let me jump ahead to what's going on in modern genetics before we acknowledge and briefly examine the work of a pioneer in biology, Gregor Mendel, who lived from 1822 to 1884. Mendel carried out some of the earliest experiments in genetics by studying the simple pea plant.

Between 1856 and 1863, he grew more than 28,000 pea plants, and he kept very careful records on these 28,000 plants. From these records, he saw clearly that there was a predictable pattern by which plant traits or characteristics were passed from one generation of pea plant to the next-a pattern that had never been reported before. He explained the patterns in principles or laws. Today these principles are known as the Mendelian Laws of Heredity.

Because we're talking about Gregor Mendel, let me make an aside and tell you something interesting about Mendel that might make him seem more *real* to you. In 1851, he was sent to the University of Vienna to study mathematics and experimental biology-the two subjects that were to make him so famous throughout the world. However, after two years of studying at the University of Vienna, he left the university. He was extremely nervous and uptight about taking examinations. It seems that this extreme nervousness about taking examinations kept him from completing his degree. Now, taking examinations makes everyone nervous, but apparently this disability did poor Gregor Mendel in, in terms of his university studies. However, the examination disability did *not* stop him from conducting his research or from becoming one of the most famous scientists of all time.

Now where was **I?** Oh, yes. I was talking about genes and the passing of certain traits and characteristics from one generation to another. Many of your individual traits, including the color and shape of your eyes, the texture of your hair, and even your height and weight resemble those of your parents. Your parents have passed traits on to you,

and this passing of traits from parents to offspring, as we know, is called "heredity."

From the earliest ages, people have been interested in studying and understanding how heredity works. People have been interested in learning how they could alter crop plants, like corn, to give the corn traits that would make the corn crop more plentiful, and better tasting. And today they can do that. Humans have also always been interested in learning how to improve the breeding of domestic animals to make them more valuable and useful. In the case of racehorses, for example, owners want to breed strong, beautiful, and fast horses that can run faster than their competitors' horses can run. **The** famous racehorse, Seabiscuit, was the offspring or son of a very famous champion racehorse called Man of War. Undoubtedly, Man of War passed on traits of strength and speed that helped his son Seabiscuit race faster than so many other horses, even though Seabiscuit was a small horse, when compared to the other larger horses he raced

OK. Well, where was **I?** Before DNA and chromosomes were discovered-when Gregor Mendel began his experiments-heredity was one of the greatest mysteries of science. As I mentioned previously, Mendel studied science at the University of Vienna, and there he learned how to use mathematics to try to explain natural phenomena. While in Vienna, he studied the work of a man called Knight, another early pioneer in the study of heredity and genetics. Knight had crossed (or mated) a variety of the garden pea that has violet flowers with a variety that had white flowers. To his surprise, he found that all of the offspring of the crosses had only violet flowers. However, when two of the violet-flowered offspring were crossed or mated, *their* offspring produced both violet *and white* flowers. **The** white-color trait had reappeared in the second generation of the plant. Knight was puzzled by this reappearance of the white flowers in the second generation, and he was unable to explain why this had happened.

Mendel decided to repeat Knight's work on the garden pea plant, called *Pisum sativum* in Latin, but he decided to apply his knowledge of mathematics and statistics to help him **predict** the results (or the outcome) of the crossbreeding of the white-flowering and the violet-flowering plants.

Now, you might ask why Mendel used the simple garden pea, rather than a rose or some other flowering plant. Also, why did he use a pea, rather than an animal to study the puzzle of heredity? Well, Mendel had a number of good reasons for choosing to study the pea plant. For one thing, the plant was readily available and plentiful where he lived in Austria. Second, the peas could be cultivated quickly, and with little effort. And most important-from a mathematician's perspective-the garden pea plant produced a large number of baby pea plants (or offspring). Actually, it seems that the garden pea was a very good subject for studying heredity for several other reasons as well. **The** garden pea plant has many traits that have two clearly different forms that are easy to tell apart, such as color. Let me give you an example. **The** color of a pea plant is either violet or white. **There** is no

intermediate form of color. Next, the mating of the garden-pea flowers can be easily manipulated so Mendel was able to control the mating of the plant easily, and then observe the offspring plants that resulted from the mating. As I mentioned at the beginning of the lecture, Mendel grew more than 28,000 plants, and recorded the many offspring of these plants. And he did all this counting and record keeping long before computers were available for record keeping and statistical analyses. Just imagine!

We're still benefiting today from the early research done by Gregor Mendel. As a result of his research, today we understand much more about genetics and heredity, though there is still so much to be learned. For instance, we know that genes are tiny biochemical structures inside each cell that determine particular hereditary traits, such as eye color, blood type, maybe intelligence, and so on, but we must remember that the gene gives only the potential for the development of a particular trait. How this potential is achieved or realized depends partly on the interaction of the gene with other genes, and it depends partly on the environment. For example, a person may have a genetic tendency toward being overweight, but the person's actual weight will depend on a number of environmental factors, such as how much and what kinds of food the person eats. Yes, we are what we eat, and thanks to the fact that our ancestors ate-and mated-we are! But then it's almost time for lunch, and my inherited hunger trait must be reminding me to end our talk and let you land me) go to lunch. See you next time.

### Chapter 9 The Origins of Heredity: Mendel and the Garden Pea Experiment

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The information you just heard was basically an introduction or warm-up for the coming lecture. Lecturers often open a lecture with some introductory remarks that are iust used to "break the ice" or to include the listeners in the material. The lecturer asked a few simple questions that you could probably remember without putting the information down in your notes. She did mention, however, what genes are: "biological instructions that control how you look, function, and behave." Did you have time to note down any of this information! What were the key words in this introductory section of the lecture! They were: biological instructions, look function, behave. You'd need to abbreviate these words, right! The lecturer also mentioned that genes determine how every living

creature on earth appears, how it functions, how it reproduces, and generally how it behaves. What are the key word or words in this segment of speech for notetakingl The words determine, how, functioD, reproduce, and behave. You may not have had time to note down all these words, but if you abbreviated a few, you could probably reconstruct the idea expressed later-especially if you and a classmate went over the lecture. Let's go on for a longer notetaking experience. Again, try to catch the key or content words the speaker uses.

Now, genes are found inside the cells of the body, and are passed down, or inherited, from one generation to the next. You may, for example, have inherited the color of **your** hair from your mother, or the ability to roll your tongue from your father. Or you may have inherited some other interesting trait you mayor may not be grateful for from your great, great, great grandfather or grandmother. Who knows? Inherited traits {orabilities} are determined by combinations of genes that are different for every human being. Although each individual is really quite unique, it's interesting to note that most genes are common to every person on Earth. In fact, humans share many of the same genes with other kinds or species of animals, from the simple, little fruit fly to our close cousin, the apes. Do you realize that the small African ape, called the Bonobo, shares 97 percent of the same genes we have? I don't know whether that's good news or not for us-e-orfor the Bonobos.

Once again, the lecturer makes reference to her listeners when she gives some examples of traits that can be inherited: hair color, rolling your tongue, and some other interesting traits she doesn't mention. You'd probably remember this part of the lecture and there's not a lot of crucial information other than the statement that "inherited traits are determined by combinations of genes that are different for every human being." How did you compact that piece of information in notes! What about the information that humans share many of the same genes with other kinds of species of animals, from the simple fruit fly to the apel Did you note that a small African ape, the Bonobo, and we share 97 percent of the same genes! Again, you might not have note down that fact, you would probably remember it-even if you don't like the idea. Bonobo is spelled Bso-n-o-b-o. Let's return to the lecture.

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There was a good deal of information in this section of the lecture. Let's see how you did in getting down the main points. Genetics is the study of genes; geneticists are those who study how genes are inherited and passed from one generation to the next. Did you use a dash between the word generation and next? I hope you didn't try to write the whole word generation out, but that you used abbreviation instead-even the letter "g" would suffice. However, there were a lot of "g" words in this part of the lecture, so you'd have to make sure you could recognize what your notes meant when you look at all those "g"s for "generation," "genetics," and "genes." That's why it's so important that you rewrite you lecture notes some time after the **lecture** while your memory for the information is still fresh. The important point is that the field of genetics began in the mid-1800s but most of what we know has been learned recently, or as the **lecturer** said "in the last few decades." The lecturer then mentions that she doesn't want to get ahead of herself, because she wants to talk about Gregor Mendel, a pioneer of biology who lived when! Did you get the dates down! Right. 1822-1884. The lecturer then mentions that between 1856 and 1868, Mendel grew more than 28,000 plants, which he kept records on. It's important to note that Mendel (and I hope you abbreviated his name) saw a predictable pattern or plant traits that were passed from one generation to the next. A question! Had the pattern even been seen before! No, it hadn't, and the pattern evolved into what today is called "The Mendelian Laws of Heredity."

What the lecturer does next is commonly done by lecturers. She makes an aside about Gregor Mendel that **might** be of interest, she thinks, to the college student listeners. Stop a minute to tecount the aside that the lecturer makes. You needn't put this aside into your notes. It's just an interest story, a bit off topic, but the lecturer is trying to make the topic more interesting to the listeners. She then remembers that she must get back to the topic of the lecture. Let's listen and take more notes.

Now where was I? Oh, yes. I was talking about genes and the passing of certain traits and characteristics from one generation to another. Many of your individual traits, including the color and shape of your eyes, the texture of your hair, and even your height and weight resemble those of your parents. Your parents have passed traits on to you, and this passing of traits from parents to offspring, as we know, is called "heredity."

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OK. Briefly, the lecturer gives more examples of traits that can be passed on from parents to children. Did you note which ones she mentioned! (pause) She defined "heredity." Look at your notes and define what heredity is. (pause) What does the lecturer say that people **have** been interested in studying and understanding from earliest time! Right, the process of how heredity works. They wanted to learn how to alter crops (like corn) to make them stronger, more plentiful, and better tasting. They also wanted to learn something about improving domestic animals. Look at your notes and reconstruct what the lecturer said about the desire to improve domestic animals by trying to understand and use laws of heredity. She used the example of two famous racehorses. Which ones! (pause) Right. Man of War and Seabiscuit. Seabiscuit was the subject of a popular movie in 2003. Did you see the movie! Well, I'm offtopic. Let's get back to the lecture. This time, I won't interrupt your notetaking until the end of the lecture. Remember, abbreviate as often as possible. For example, you'll hear the lecturer talk about two researchers, Mendel and Knight. Use M for Mendel and K for Knight. Also, you'll be hearing about plants with violet and white flowers. In your note, let v. stand for violet and w. for white flowers. It's also important for you to note down in this next section of the lecture the reasons why Mendel

used **the** pea plant **in** his **research**. She gives a number of reasons so you may want to number the reasons as you listen. Ready! Let's continue.

OK. Well, where was I? Before DNA and chromosomes were discovered-when Gregor Mendel began his experiments-heredity was one of the greatest mysteries of science. As I mentioned previously, Mendel studied science at the University of Vienna, and there he learned how to use mathematics to try to explain natural phenomena. While in Vienna, he studied the work of a man called Knight, another early pioneer in the study of heredity and genetics. Knight had crossed (or mated) a variety of the garden pea that has violet flowers with a variety that had white flowers. To his surprise, he found that all of the offspring of the crosses had only violet flowers. However, when two of the violet-flowered offspring were crossed or mated, **their** offspring produced both violet and white flowers. The whitecolor trait had reappeared in the second generation of the plant. Knight was puzzled by this reappearance of the white flowers in the second generation, and he was unable to explain why this had happened.

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We're still benefiting today from the early research done by Gregor Mendel. As a result of his research, today we understand much more about genetics and heredity, though there is still so much to be learned. For instance, we know that genes are tiny biochemical structures inside each cell that determine particular hereditary traits, such as eye color, blood type, maybe intelligence, and so on, but we must remember that the gene gives only the potential for the development of a particular trait. How this potential is achieved or realized depends partly on the interaction of the gene with other genes, and it depends partly on the environment. For example, a person may have a genetic tendency toward being overweight, but the person's actual weight will depend on a number of environmental factors, such as how much and what kinds of food the person eats. Yes, we are what we eat, and thanks to the fact that our ancestors ate-and mated-we are! But then it's almost time for lunch, and my inherited hunger trait must be reminding me to end our talk and let you (and me) go to lunch. See you next time.

How did you do! You listened to a great deal of information in this final section of the lecture. I recommend you compare the notes you iust took with those of your classmate to see how you (and your classmate) captured the information heard. The important thing is that you're practicing development of your notetaking skills when listening to English lectures. How are you doing! Remember, it takes time and practice, practice, and more practice.

Unit Five Biology:
Understanding Genetics to Genetic Engineering

Chapter 10 Genetic Engineering in the Biotech Century: Playing It Smart or Playing Roulette with Mother Nature's Designs?

## **A** A. Orientation Listening Script

All right, I started our last session together by asking a few questions that led me to talk about two major issues in biology. One of the major issues I talked about was Mendel's experiments on the garden pea plant, and his findings about how certain traits are passed from one generation to the next. The other major issue I talked about was the role heredity and genetics play in who we are, what we look like, and how we generally behave, and I need to stress that word *generally* when I saw "how we generally behave."

Today, I'll be talking about the topic of genetic engineering. I'll be talking about what genetic engineering is, and I'll be touching on some of the potential advantages and some of the very real dangers that genetic engineering brings with it. I'll be giving some examples of genetic-engineering projects mainly in the field of agriculture, but also in the field of medicine. I'll also mention some of the cons of genetic engineering, especially of new microorganisms. Finally, I hope to finish

up the lecture by explaining in more detail exactly how genetic engineering works. I hope to cover all these topics, but, as you know, I sometimes get sidetracked or "off-topic" in my lectures, and, I sometimes run out of time. But, let's see how things go.

OK. Let me again start off with some questions. Do you realize that today we can grow orange plants (or lemon plants) from orange (or lemon) tissue in vesicles, which are small bladderlike **bags?** Some industry analysts believe that the day is not far off when orange juice will be "grown" in vats, and there will be no need to plant orange or lemon orchards or groves to obtain orange juice. Question. Is this a good idea and a benefit for humankind? Hmmm! Think about it.

In the field of animal research, scientists are working to develop engineered "super animals." These **super** animals will have enhanced characteristics for food production, such as extra nutritional value or lower fat content. Some scientists are also creating new kinds of animals, called transgenic animals, that can serve as "chemical factories" to produce drugs and medicines for other animals, and maybe one day, for human beings. Researchers are also trying to create animals that can serve as organ donors for humans. The question: Is this the "right" thing to do to animals-to make them grow to supersize, or to use them as organ donors for **people?** Hmml That's the question.

All right. Here's another possibly more controversial question involving genetic screening in medicine. Should a couple expecting a baby be able to make sure, through genetic screening, that the child they're expecting does not show signs of having inherited some hereditary disorder, such as very poor eyesight, or mental depression, or don't forget that tendency to be overweight? Hmmmi Another more personal question. If you could, would you use genetic screening to find out if your future child (or grandchild) had an inherited disease in his or her genetic **makeup?** Now, it's certainly true that many diseases and disorders that people get are caused by agents such as viruses and bacteria, or things in the environment, such as pollutants, but we're learning today that the cause of a number of diseases, like certain kinds of cancer and a disease like cystic fibrosis, are, in fact, genetic. These diseases are thought to be passed down from generation to generation.

Take the genetic disorder known as hemophilia, for example. Hemophilia is a genetic disorder involving the blood-clotting factor. The symptoms of hemophilia are uncontrolled internal and external bleeding if the hemophiliac gets even a small injury. Today, thanks to advances in medicine, the symptoms of hemophilia can be controlled by giving the hemophiliac injections of the blood-clotting factor that's missing from the blood.

As far as the issue of medical screening for genetic diseases, do you know that in the United States today, hospitals are screening newborn babies for a wide range of congenital (or hereditary] diseases, such as hemophilia and cystic fibrosis? By the year 2004, every state in the United States was requiring that newborn infants be tested for a long list of inherited diseases. That's the good news. But, and this is a pretty big "but," with the knowledge we have of human genetics, and with

the techniques we have for screening newborns-and even embryoshow long will it be before we're screening (and maybe selecting] human embryos for characteristics such as physical strength, or other qualities such as eye or hair color . . . you name it? Should scientists engage in the genetic screening or engineering of human beings?

But let me return to the topic of genetic engineering of plants and animals that's already going on in this biotech century of ours. We have already seen hints of the coming biotech revolution with the cloning of animals, such as the famous Dolly who was born in 1996. (By the way, did you know that Dolly the cloned sheep later gave birth to a lamb, demonstrating that clones originating in the laboratory are able to breed in the traditional way, and are able to produce healthy offspring?) Now just think about the implications of Dolly for a minute. Today if we can produce cloned animals, like sheep and mice-as we can-are we really that far from seeing the first human clone created? Some people will say, UI can't wait for that to happen." Others will be horrified at the very thought. They believe that scientists who attempt to clone human beings, or animals for that matter, have overstepped the ethical boundaries of science, and are even endangering the safety of humankind with their cloning experiments. Some people believe that genetic engineering and cloning is "playing it smart." Others, however, think that genetic engineering and cloning is "playing roulette with Mother Nature."

Whatever you may think about the ethics of the genetic engineering of humans or animals, today biologists are using genetic engineering for two main purposes: (1) in agriculture, to make heartier plants and crops for agriculture; and (2) in medicine, to make newer and, they hope, better drugs for medicine.

But let me start off with the field of agriculture. We can see the evidence of genetic engineering of crops sitting right on the supermarket shelves, probably in that box of cereal you bought at the supermarket recently. Did you know that, by the year 2004, more than fifty crop plants had been genetically engineered, including potatoes, soybeans, and com, just to name a few. Can you guess how much farm acreage is now devoted to genetically engineered crop production in the United States alone today? Well, let me tell you. Between the years 1998 to 2003, 68 percent of the soybean acreage, 26 percent of the com acreage, and more than 69 percent of the cotton acreage were devoted to genetically engineered (or what they sometimes call "transgenic") crop production. That's a lot of genetic engineering going on in the early years of this coming biotech century, wouldn't you say?! (You know, I'll bet if you recently ate a tomato, it could have come from a transgenic tomato crop. And, I'll also bet you didn't even know that you ate a genetically engineered tomato.]

For better or for worse, and in many countries, agriculture, especially-but not only-in the United States, has been impacted in serious and significant ways by the use of genetic-engineering practices. The good news is that genetic engineering is able to produce crop plants that are more tolerant of stressful climate conditions, such as

drought. In addition, genetic engineering can be used to control how fast or slow fruit ripens so that crops can be shipped to markets far from the farm that grew the crop.

Let me give you another example of one of the potential benefits of genetic engineering of crops. Plant geneticists have developed strains of crops that are resistant to some chewing insects, such as grasshoppers and beetles. The geneticists inserted a certain gene into the crop plants. This inserted gene makes a protein that injures the stomach of an insect that is chewing on the plant. Well, when that grasshopper or the beetle gets a bad stomachache from chewing on the genetically engineered plant, it decides to leave and look for another plant to eat. As a result, the good news is that crops that are resistant to certain insects do not need to be sprayed with pesticides that do tremendous harm to our environment when they get into our rivers and water sources.

Now for some bad news about genetic engineering. Let me tell you a frightening story about a gene-altered monster that almost got away-that is, it almost got out of the laboratory! In the early 1990s, a European genetic-engineering company was preparing to field-test and then commercialize on a major scale, a genetically engineered soil bacteria called klebsiella planticola. For your notes, that's spelled k-I-e-bs-i-e-double I-a p-l-a-n-t-i-c-o-l-a, The genetically altered bacterium was developed to get rid of crop residues, the part of the plant not harvested for food. The bacteria helped to decompose the plant material. The amazing and frightening thing was that the new soil bacteria klebsiella planticola had been tested, as it turns out, in a careless and very unscientific manner-by scientists working for the biotech industry. The biotech scientists believed that the bacterium was safe for the environment and would greatly aid farmers. Well, fortunately, a team of independent scientists decided to run their own tests on the genealtered klebsiella planticola. When they did, they discovered that the researchers from the biotech industry had apparently created a biological monster-a genetically engineered microorganism that could kill all terrestrial plants, if it were released. After the exposure of the danger of this new bacterium, the gene-altered klebsiella planticola was never commercialized. My point is that we need to be very careful about testing the safety of genetically engineered organisms before they come to the marketplace.

In addition to finding evidence of genetic engineering in agriculture, we can also find evidence of genetic engineering in many of the drugs produced by pharmaceutical companies around the world. A key goal of genetic engineers is to make drugs that can cure genetic disorders such as cystic fibrosis and hemophilia, which I spoke about earlier. Another key goal is to produce new vaccines that will protect people against diseases such as smallpox and malaria, and against new diseases that will arise in the coming biotech century.

OK. I wanted to finish up the lecture by talking about how genetic engineering actually works, ... but I seem to have run out of time, ... so I'll ask you to read the section about how genetic engineering works in your textbook. It sums up, in a nutshell, how the process works.

## Chapter 10 Genetic Engineering in the Biotech Century: Playing It Smart or Playing Roulette with Mother Nature's Designs7

## A B. Listening and Notetaking Script

All right, I started our last session together by asking a few questions that led me to talk about two major issues in biology. One of the major issues I talked about was Mendel's experiments on the garden pea plant, and his findings about how certain traits are passed from one generation to the next. The other major issue I talked about was the role heredity and genetics play in who we are, what we look like, and how we generally behave, and I need to stress that word *generally* when I saw "how we generally behave."

Today, I'll be talking about the topic of genetic engineering. I'll be talking about what genetic engineering is, and I'll be touching on some of the potential advantages and some of the very real dangers that genetic engineering brings with it. I'll be giving some examples of genetic-engineering projects mainly in the field of agriculture, but also in the field of medicine. I'll also mention some of the cons of genetic engineering, especially of new microorganisms. Finally, I hope to finish up the lecture by explaining in more detail exactly how genetic engineering works. I hope to cover all these topics, but, as you know, I sometimes get sidetracked or "off-topic" in my lectures, and, I sometimes run out of time. But, let's see how things go.

All right, let's take a minute to see if you got what the lecturer was doing in the first part of the lecture. Basically, she was recalling that last session, she talked about two major issues in biology. Look at your notes and list the two major issues she brought up last session. (pause) Right. One of them was Mendel's experiment on the garden pea. The other was the role heredity and genetics play in who we are and so forth. Then the lecturer introduced the topic of this lecture: genetic engineering. And then she mentioned something about the topics she would be talking about today. Check your notes. What did she say they were! (pause) Did you note down that she'll be talking about, or touching upon the potential advantages and the real dangers of genetic engineering! After that, she mentioned that she'd be giving some examples of genetic engineering. What were the two fields she specifically mentioned! Good. Agriculture and medicine. The lecturer then mentioned something else. What was it! Right. She said she'd be mentioning some of the pros (oops, I mean some of the cons) of the genetic engineering of new microorganisms. Did you catch the next point that the lecturer hoped to also cover, "how genetic engineering works"? I hope you were using the abbreviation "GE" rather than the two words, genetic engineering. You could also use the abbreviation of "gen en, .. whichever works for you. I hope you also abbreviated as many words and phrases as possible. It saves a lot of time. Finally, the

lectuier **expressed** fear that she **wouldn't** have time to cover **everything** she wanted to, especially **about** how GE works, but let's go **back** to **the** lecture. **We'll listen** to a **longer part** of **the** lecture. Ready to **take** more notes!

OK. Let me again start off with some questions. Do you realize that today we can grow orange plants (or lemon plants) from orange (or lemon) tissue in vesicles, which are small bladderlike **bags?** Some industry analysts believe that the day is not far off when orange juice will be "grown" in vats, and there will be no need to plant orange or lemon orchards or groves to obtain orange **juice?** Question. Is this a good idea and a benefit for <u>humankind?</u> Hmmml Think about it.

In the field of animal research, scientists are working to develop engineered "super animals." These super animals will have enhanced characteristics for food production, such as extra nutritional value or lower fat content. Some scientists are also creating new kinds of animals, called transgenic animals, that can serve as "chemical factories" to produce drugs and medicines for other animals, and maybe one day, for human beings. Researchers are also trying to create animals that can serve as organ donors for humans. The question: Is this the "right" thing to do to animals-to make them grow to supersize, or to use them as organ donors for people? Hmml That's the question.

Well, now. Did you write down the questions the lecturer posed! I hope you abbreviated and used symbols as much as possible. Look at your notes. Wlzat was the [irst question she posed about Did you note the implication that could result from growing lemon and orange plants in sacs of tissue! Did you use a "question mark" to signal the questions: I'm sure you did.

Let's see. The lecturer mentioned something about "super animals." Wizat did she say scientists intend to do with these animals! Wizat was the ethical question she taised! Check your notes. OK. Let's return to the lecture. The coming section has to do with genetic screening, or "gs," as I hope you'll use in your notetakiiig.

All right. Here's another possibly more controversial question involving genetic screening in medicine. Should a couple expecting a baby be able to make sure, through genetic screening, that the child they're expecting does not show signs of having inherited some hereditary disorder, such as very poor eyesight, or mental depression, or don't forget that tendency to be **overweight?** Hmmmi Another more personal question. If you could, would you use genetic screening to find out if your future child (or grandchild) had an inherited disease in his or her genetic **makeup?** Now, it's certainly true that many diseases and disorders that people get are caused by agents such as viruses and bacteria, or **things** in the environment, such as pollutants, but we're learning today that the cause of a number of diseases, like certain kinds of cancer and a disease like cystic fibrosis, are, in fact, genetic. These diseases are thought to be passed down from generation to generation.

Take the genetic disorder known as hemophilia, for **example.** Hemophilia is a genetic disorder involving the blood-clotting factor. The

symptoms of hemophilia are uncontrolled internal and external bleeding if the hemophiliac gets even a small injury. Today, thanks to advances in medicine, the symptoms of hemophilia can be controlled by giving the hemophiliac injections of the blood-clotting factor that's missing from the blood.

As far as the issue of medical screening for genetic diseases, do you know that in the United States today, hospitals are screening newborn babies for a wide range of congenital (or hereditary) diseases, such as hemophilia and cystic fibrosis? By the year 2004, every state in the United States was requiring that newborn infants be tested for a long list of inherited diseases. That's the good news. But, and this is a pretty big "but," with the knowledge we have of human genetics, and with the techniques we have for screening newborns-and even embryoshow long will it be before we're screening (and maybe selecting) human embryos for characteristics such as physical strength, or other qualities such as eye or hair color . . . you name it? Should scientists engage in the genetic screening or engineering of human beings?

Catch your notetaking breath for a minute. What was the main point or thrust of this last section of the lecture! Can you sum it up in a phrase! Right. Genetic screening in medicine. Check your notes. Did you note that GS could be used to show if a baby has **signs** of some **hereditary** disorder. What were **the** disorders he mentionedt Look at your notes. Can you find these ideas written in your notes! Poor eyesight. (Did you use the symbol of the eyet) Mental depression. And somewhat jokingly, being overweight. The lecturer then asked if you could, would you yourself use GS to determine if your **child** had an **inherited** disease in his/her genetic makeup. That's a tough question, no doubt. The lecturer mentioned a couple of diseases that could **be** genetic. What **were** they! There were three of them. One of them was cystic fibrosis. What were **the** other two! **Are they** in your notes! Did you note down by the year 2004, hospitals in the United States screen newborn babies for hereditary (or what she called "congenital") diseases! He next brought up a touchy, ethical issue regarding genetic screening and genetic engineering of human beings! Look at your notes and articulate the concern and the question the lecturer raised. (pause) All right, let's **return** to your notetaking. In this next section, you'll **hear** about **the** famous Dolly **the** sheep. Ready!

But let me return to the topic of genetic engineering of plants and animals that's already going on in this biotech century of ours. We have already seen hints of the coming biotech revolution with the cloning of animals, such as the famous Dolly who was born in 1996. (By the way, did you know that Dolly the cloned sheep later gave birth to a lamb, demonstrating that clones originating in the laboratory are able to breed in the traditional way, and are able to produce healthy off-springl] Now, just think about the implications of Dolly for a minute. Today if we can produce cloned animals, like sheep and mice-as we can-are we really that far from seeing the first human clone created?

Some people will say, "1 can't wait for that to happen." Others will be horrified at the very thought. They believe that scientists who attempt to clone human beings, or <u>animals</u> for that matter, have overstepped the ethical boundaries of science, and are even endangering the safety of humankind with their cloning experiments. Some people believe that genetic engineering and cloning is "playing it smart." Others, however, think that genetic engineering and cloning is "playing roulette with Mother Nature".

OK. Can you tell me when Dolly was bomt (pause) OK. Can you tell **me the** aside **the lecturer** related about **Dolly**? (pause) OK Let's go on. What ethical issue did the lecturer raise after making the point that we can clone animals like sheep and micet (pause) The lecturer said that some people believe that genetic engineering is "playing it smart," but others have another opinion. What is it? **Sometimes** it is difficult to take **notes** on concepts and ideas **when** there are few statistics, dates, and so forth given, but you just have to grasp the ideas and put down a few words that Will enable you to remember what the ideas were. Now the next section of the lectureincludes some of those statistics I just mentioned. See how you do both in grasping **the ideas** and in getting down **the** facts and statistics the lecturer mentions in this next . . . and rather long ... section of **the** lecture. We'll go up to **the** section about **the** frightening story of the near-release of klebsiella planticola. Remembetl OK. Listen, and take **notes** on **the** information.

Whatever you may think about the ethics of the genetic engineering of <u>humans</u> or <u>animals</u>, today biologists are using genetic engineering for two main purposes: (1) in agriculture, to make heartier plants and crops for agriculture) and (2) in medicine, to make newer and, they hope, better drugs for medicine.

But let me start off with the field of agriculture. We can see the evidence of genetic engineering of crops sitting **right** on the supermarket shelves, probably in that box of cereal you bought at the supermarket recently. Did you know that, by the year 2004, more than fifty crop plants had been genetically engineered, including potatoes, soybeans, and com, just to name a few. Can you guess how much farm acreage is now devoted to genetically-engineered crop production in the United States alone today? Well, let me tell you. Between the years 1998 to 2003, 68 percent of the soybean acreage, 26 percent of the com acreage, and more than 69 percent of the cotton acreage were devoted to genetically engineered (or what they sometimes call "transgenic") crop production. **That's** a lot of genetic engineering going on in the early years of this coming biotech century, wouldn't you say?! (Youknow, I'll bet if you recently ate a tomato, it could have come from a transgenic tomato crop. And, I'll also bet you didn't even know that you ate a genetically engineered tomato.

For better or for worse, and in many countries, agriculture, especially-but not **only—in** the United States, has been impacted in serious and significant ways by the *use* of genetic-engineering practices.

The good news is that genetic engineering is able to produce crop plants that are more tolerant of stressful climate conditions, such as drought. In addition, genetic engineering can be used to control how fast or slow fruit ripens so that crops can be shipped to markets far from the farm that grew the crop.

Let me give you another example of one of the potential benefits of genetic engineering of crops. Plant geneticists have developed strains of crops that are resistant to some chewing insects, such as grasshoppers and beetles. The geneticists inserted a certain gene into the crop plants. This inserted gene makes a protein that injures the stomach of an insect that is chewing on the plant. Well, when that grasshopper or the beetle gets a bad stomachache from chewing on the genetically engineered plant, it decides to leave and look for another plant to eat. **As** a result, the good news is that crops that are resistant to certain insects do not need to be sprayed with pesticides that do tremendous harm to our environment when they get into our rivers and water sources.

In this section of the lecture, the speaker talks about the two main purposes for which genetic engineering is being used today. What are they! Fine. Then the lecturer begins to focus on the field of agriculture. Check your notes. Can you answer these questions! How many crops were being genetically engineered by 2004? Can you name the ciops! Look at your notes. Next, did you take down the information about how much farm acreage is devoted to genetically engineered crop production in the United Statest The lecturer brought up another aside about a tomato. Do you remember what he saidt The lecturer just used this example to try to make the discussion more real for the listeners. All right. Let's go on to the frightening story of the monster that almost got out of the lab. Are you ready to finish up your notetaking! We'll go to the end of the lecture this time.

Now for some bad news about genetic engineering. Let me tell you a frightening story about a gene-altered monster that almost got away-that is, it almost got out of the laboratory! In the early 1990s, a European genetic-engineering company was preparing to field-test and then commercialize on a major scale, a genetically engineered soil bacteria called *klebsiella planticola*. For your notes, that's spelled k-l-e-bs-i-e-double l-a p-l-a-n-t-i-c-o-l-a. The genetically altered bacterium was developed to get rid of crop residues, the part of the plant not harvested for food. The bacteria helped to decompose the plant material. The amazing and frightening thing was that the new soil bacteria klebsiella planticola had been tested, as it turns out, in a careless and very unscientific manner-by scientists working for the biotech industry. The biotech scientists believed that the bacterium was safe for the environment and would greatly aid farmers. Well, fortunately, a team of independent scientists decided to run their own tests on the genealtered klebsiella planticola. When they did, they discovered that the researchers from the biotech industry had apparently created a biological monster-a genetically engineered microorganism that could kill all terrestrial plants, if it were released. After the **exposure** of the danger of this new bacterium, the gene-altered **klebsiella** plaaticola was never commercialized. My point is that we need to be **very** careful about testing the safety of genetically engineered organisms before they come to the marketplace.

In addition to finding evidence of genetic engineering in agriculture, we can also find evidence of genetic engineering in many of the drugs produced by pharmaceutical companies around the world. A key goal of genetic engineers is to make drugs that can cure genetic disorders such as cystic fibrosis and hemophilia, which I spoke about earlier. Another key goal is to produce new vaccines that will protect people against diseases such as smallpox and malaria, and against new diseases that will arise in the coming biotech century.

OK. I wanted to finish up the lecture by talking about how genetic **engineering** actually works, ... but I seem to have run out of time, ... so I'll ask you to read the section about how genetic engineering works in your textbook. It sums up, in a nutshell, how the process works. Well, that's about it for today. See you next week.

. Well, that's about it for your notetaking experience. I trust you're developing your ability to listen and take notes on what you hear. This last section of the lecture dealt with the frightening story of the gene-altered monster that almost got away, thanks to the unscientific testing by some scientists. The lecturer even **spelled** klebsiella planticola, **the engineered** soil bacteria that were supposed to **help** not hurt **the** world. **What** point did **the lecturer** make about **the** creation of klebsiella planticolas It had to do with testing of genetically engineered organisms before they come to market, right? OK. The last section of the lecture returned to the **idea** of using GE for **the benefit** of **people** with medical problems. What were the two goals of genetic engineers working in many of the pharmaceutical companies around the world! Look at your notes. Can you answer this question; Fine. The lecturer notes that she's run out of time. She wanted to talk about how GE works, but she recommends that you read the article in the reading section of this textbook. Sometimes lecturers just don't get a chance to finish all they want to finish in a lecture. That's just the way it goes, I guess, with lecturers, with students, and with notetaking mentors. Have a fine day.

### **APPENDIX** B: ANSWER KEYS

Unit One

Anthropology:

The Evolution of Human Endeavor

### Part 1: Short-Answer Questions

### Chapter 1 Anthropology: The Study of Humans and Their Creations

- 1. The literal meaning of the word *anthropology* is lithe study of man. "
- 2. Western civilization takes credit for the development of the study of anthropology.
- 3. The Greek and Roman philosophers were more concerned with thoughts of the ideal society rather than describing their own.
- 4. The period of travel and discovery is called The Age of Exploration.
- 5. Another term for man or human being that was used in the lecture is Homo *sapiens*.
- 6. The two broad fields of anthropology are physical and cultural anthropology.
- 7. Margaret Mead is the anthropologist who studied the people of Samoa.
- 8. The field that studies cultures through material sources is archaeology.
- 9. An archaeological site mentioned in the lecture is King Tut's Tomb in Luxor, Egypt.
- 10. An ethnography describes the behavior of different peoples.
- 11. Social anthropology deals with the study of people as social beings.
- 12. Some areas of employment for an applied anthropologist are urban planning, health care, and international development.

### Chapter 2 The Concept of Culture: Understanding One Another

- 1. Culture is that complex whole which includes knowledge, belief, art, morals, custom, and any other capabilities and habits acquired by man as a member of society.
- 2. The three stages of cultural growth are savagery, barbarism, and civilization.
- 3. A major reason to learn about different cultures is to use a foreign language effectively.
- 4. Seelye's six skills are:
  - (1) Cultivate curiosity about another culture and empathy toward its members.
  - (2) Recognize that role expectations and other social variables affect the way people speak and behave.
  - 131 Realize that effective communication requires discovering the culturally conditioned images of people when they think, act, and react to the world around them.

- (4) Recognize that educational variable and conventions shape people's behavior...
- 15) Understand that people generally act the way they do because they are exercising the options their society allows for satisfying basic physical and psychological needs.
- (6) Develop the ability to evaluate the truth of a generalization about the target culture and to locate and organize information about the target culture from books, mass media, people and personal observations.
- 5. Culture and society must coexist in order for people to create a culture or way of life.
- 6. A society must be small, isolated, and stable to share a single culture.
- 7. Another term for multicultural is *pluralistic*.
- 8. We find groups of subcultures in large societies, such as those in Canada, the **United** States, and Egypt.
- 9. Three universals common to all cultures are the use of rewards and punishments to encourage correct behavior, the withholding of certain information from the young, and the control of the education of the young by the dominant group.
- 10. According to Sapir, it is the individual who really thinks and acts and dreams and revolts.

### **Unit Two**

# History: The Passing of **Time** and Civilizations

### Part 1: Short-Answer Questions

### Chapter 3 The Egyptian Pyramids: Houses of Eternity

- 1. The Egyptian Empire lasted for more than 3,000 years.
- **2.** More than thirty consecutive dynasties ruled ancient Egypt.
- 3. The main function of the pyramids was as a burial place for the Egyptian kings and their family members.
- 4. Examples of "grave goods" that the Egyptians provided for a dead person to take to the next world include food, clothing, furniture, weapons, treasures, and servants.
- 5. The mastaba means "bench" or "long seat." It looked like a low, flat-topped rectangle-something like a low bench or shoebox.
- 6. The three Great Pyramids were located near the town of Giza, on the west bank of the Nile River, just outside Cairo, the capital city of Egypt.
- 7. The ancient Greeks called King Khufu "Cheops."
- 8. The approximate number of limestone blocks used to build Khufu's pyramid totaled 2.3 million. The blocks averaged 2,500 kilos each. The largest stone block is estimated to have weighed 15,000 kilos.

- 9. **The** height of each of the Great Pyramids is the following:
  - a. **The** Great **Pyramid—originally** 147 meters but today the top ten meters are missing.
  - b. Kafre's pyramid-s-originally 144 meters but today it is only 0.8 meters lower.
  - c. Menakaure's pyramid is 62.5 meters high.
- 10. Thutmose I changed the way Egyptian pharaohs built their tombs by having his tomb dug out of the rock of a valley far from the Nile River and Cairo. He gave up pyramid construction.

### Chapter'" The First Emperor of China: Building an Empire and a House of Eternity

- 1. Qin Shihuang lived from 259 B.C.E. to 210 B.C.E.
- 2. His name was Ymg Zheng
- 3. He unified the empire in 221 B.C.
- 4. **The** defeat of the six regional kingdoms resulted in the unification of the then Chinese empire and the imperial system in China that lasted 2,000 years.
- 5. He made changes in the way the empire was <u>administered</u>. He created thirty-six prefectures with officials on fixed salaries who <u>administered</u> the prefectures.
- 6. To unify and protect his empire, Qin Shihuang standardized the system for writing Chinese characters for all the kingdoms. He also created one system of weights and measures and one system of currency to be used throughout the empire.
- 7. Various answers are possible, some of which may be as follows:
  - a. **The** ancient Chinese and Egyptian believed in an afterlife.
  - b. The rich built massive tombs and furnished them with "grave goods" for the dead pharaoh or emperor.
  - c. They tried to hide the location of the tomb and its possessions.
  - d. Other answers are possible.
- 8. Historians believe 700,000 laborers were involved in building the Emperor's tomb.
- 9. Qin Shihuang constructed three major imperials highways that eventually stretched approximately 6,800 kilometers (4,216 miles] through the empire. In comparison, by 150 C.E., the Roman Empire stretched about 5,984 kilometers (3,710 miles].
- 10. Construction of the tomb took about eleven years.
- 11. Because 12,000-square-meter area at the site of the tomb has a mercury content ten times higher than the surrounding area.
- **12.** a. In 1975, the Chinese authorities built a museum on the excavation site.
  - b.1n 1976, Pit No.2 was unearthed.
  - c. In 1979, Pit No. 1 was first opened to the public by Chinese officials.
  - d. In 1994, visitors were allowed to visit Pit No.2.
- 13. Various and creative answers are possible but all should be relevant to the historical topic.

# Unit Three Sociology: Women, Men, and Changing Roles

### Part 1: Short-Answer Questions

### Chapter 5 The Women's Movement From Uberation to Feminism

- 1. The women's movement began in the mid-1800s in the United States. The women's movement is a century and a half old in the United States.
- 2. Married women were not **allowed** to inherit property, to control money that they earned, to have custody of their children in case of divorce, or to vote on the laws that governed their lives.
- 3. After World War I, women gained the right to vote. American women gained the right to vote in 1920.
- 4. During World War II, many women began working outside the home. Large numbers of women entered the job market to do the factory jobs of the men who had been drafted into military service. They proved to be capable and dependent workers in the factories.
- 5. 1.5 percent of the 200,000 firefighters in the United States are women, and 4 percent of airline pilots and navigators are women.
- 6. 9.1 million women-owned businesses employed 27.5 million people, and contribute 3.6 trillion dollars to the American economy. The states in which the greatest growth and expansion in womenowned businesses has occurred are Idaho, Wyoming, Utah, Nevada, and Arizona.
- 7. Women are thought to be successful because they treat their businesses like their children.
- 8. Ireland, Nicaragua, and the Philippines have had women presidents. Women have served as prime ministers in the United **King**dom, France, Thrkey, Pakistan, Canada, and Bangladesh.
- 9. The number of women in the workforce grew from 27 percent of the workforce to 57.6 percent in 2003.
- 10. A major obstacle to women's emancipation is the lack of government-sponsored social-service support for working women with children.

### Chapter 6 The Men's Movement: What Does It Mean to Be B Man?

- 1. Susan Faludi authored *Backlash:* **The Undeclared** War Against American Women.
- **2.** Robert Bly is considered to be one of the fathers of the men's movement.
- 3. Robert Bly's book is titled *Itoti John*.
- 4. Some fathers of the men's movement blame the Industrial Revolution for today's crisis in masculinity.
- 5. Before the Civil War, most men were farmers, craftsmen, or shop-keepers, who worked close to their homes.

- 6. At the <u>beginning</u> of the twentieth century, many men became factory and office workers.
- 7. Men in the mytho-poetic men's movement believe men should be initiated into manhood.
- 8. This woman and her husband now share responsibility for their family's emotional well-being.

### Unit Four

## Communication:

## The Influence of Language, Culture, and Gender

### Part 1: Short-Answer Questions

### Chapter 7 Classroom Communication: Language and Culture in the Classroom

- 1. Communication is talk, gestures, or nonverbal signals that we use to send messages that convey our thoughts, emotions, or intentions to other human beings.
- 2. Anderson and Powell's article is titled "Intercultural Communication in the Classroom."
- 3. A ritual is a systematic procedure used to perform a certain act, or to communicate a certain message.
- 4. Students of Asian backgrounds generally believe they will learn best by absorbing knowledge given them by the teacher.
- 5. In Vietnam, classroom interaction is tightly controlled by the teacher.
- 6. The Vietnamese consider teachers to be honored members of society.
- 7. Students from Germany do not often disagree with a teacher.

### ChapterS

## Gender and Communication: Male-female Conversation as Cross-cultural Communication

- 1. Gender is the social identity that men and women learn as they grow up in a culture.
- 2. Deborah Tannen wrote this book.
- 3. Boys usually play outdoors, and have hierarchically structured games that are played in large groups. One boy usually acts as a leader, and the other boys try to gain status by taking "center stage." Boys' games usually have clear winners and losers.
- 4. Girls usually play indoors, and in their games, everyone gets a turn, and the group makes up the rules together as they play. There are usually no winners and losers in girls' games.
- 5. The girls were making **rings** for their fingers.
- 6. In the game "house," one girl usually acts as the mother. This girl gives orders to the girls who are acting as the children. In other girls' games, giving of orders is less common.
- 7. This stereotype is that women talk more than men. The research the lecturer quotes seems to disprove this stereotype.
- 8. A woman must paraphrase words sounding like the names of her father-in-law and brothers in Zulu culture.

## Biology:

## Understanding Genetics to Genetic Engineering

### Part 1: Short-Answer Questions

### Chapter 9 The Origins of Genetics: Mendel and the Garden Pea

- 1. Genes provide the biological instructions that control how people look, function, and partly behave. They also determine how living creatures on earth appear, function, reproduce, and behave.
- 2. Genes are found inside the cells of the body.
- 3. Traits mentioned by the lecturer: hair color, ability to roll your tongue. Additional traits not mentioned by the lecturer: eye or skin color, certain health problems (such as cancer, hemophelia, and so on), and a number of other traits.
- 4. The small African ape called the Bonobo shares 97 percent of the same genes humans do.
- 5. Genetics is a branch of biology; geneticists are scientists who study how genes are inherited and passed from one generation to the next.
- 6. a. Gregor Mendel was born in 1822 and died in 1884.
  - b. Mendel experimented and kept records on 28,000 pea plants between 1856 and 1863.
- 7. The Mendelian Laws of Heredity were related to the predictable pattern by which plant traits or characteristics are passed from one generation of plant to the next.
- 8. Mendel studied mathematics at the University of Vienna in 1851, but he left the university because he was extremely nervous about taking examinations.
- 9. The lecturer made reference to the racehorses Seabiscuit and Man of War to give an example of how humans have tried to improve the breeding of domestic animals to make them more valuable and useful.
- 10. Knight was another early pioneer of the study of heredity and genetics. He crossed a variety of garden pea that had violet flowers with a variety of pea that had white flowers and found that all of the offspring had only violet flowers. When the offspring of the two violet flowers were mated, their offspring produced both violet and white flowers. The white color had reappeared in the second generation of the plant. Knight did not know why this happened.
- 11. Mendel used a plant (the peal rather than an animal for the following reasons:
  - a. The plant was available and plentiful where he lived.
  - b. The plant has a number of traits that are clearly different forms, such as color, that are easy to tell apart.
- 12. What was so amazing about Mendel's record keeping of his work on the 28,000 plants was that it was before computers were able to do the necessary calculations or computations.

# Chapter 10 **Genetic** Engineering in the Biotech Century: Playing It Smart or Playing Roulette with **Mother** Nature's Design?

- 1. The lecturer began by mentioning the two major issues in biology that he talked about in the last lecture: (11 Mendel's experiments and findings about how traits are passed from one generation to the next, and (2) the role heredity and genetics play in our looks, our personality, and our general behavior. This mention of the information given in the previous lecture established a link with what came before.
- **2.** The topic of lecture 2 includes the following: 11) the potential advantages of genetic engineering, (2) the real dangers of genetic engineering, (31 examples of genetic engineering, and (4) the pros and cons of creating new microorganisms in agriculture with genetic engineering.
- 3. a. Vesicles are small bladderlike bags in which oranges or lemons can be grown from tissues.
  - b. Super animals are animals with enhanced characteristics (such as extra nutritional value or lower fat content) for food production.
  - c. Transgenic animals are animals that can serve as chemical factories to produce drugs/medicines for other animals or people in the future.
  - d. Animal organ donors are animals whose organs they hope to "harvest" and use for people whose organs are diseased.
- 4. Some inherited diseases include: (11 some kinds of cancer, (2) cystic fibrosis, and (3) hemophilia.
- 5. After 2004, hospitals are required to screen newborn babies for a number of congenital (or hereditary] diseases such as hemophilia and cystic fibrosis.
- 6. Dolly was the cloned sheep born in 1996 that also gave birth to a nonclone lamb, demonstrating that clones originating in the laboratory are able to breed in the traditional way. The controversy has to do with the fact that if we can clone animals, will we one day be able to clone human beings?
- 7. The two main purposes for which biologists are using genetic engineering are: (1) in agriculture, to make heartier plants and crops, and (2) in medicine, to make newer and better drugs for medicine.
- 8. Genetic engineering is able to produce crop plants that are more tolerant of stressful climate conditions, such as drought. It also makes possible the shipment of crops that ripen slowly so they can be shipped to markets far from where they grew. The danger is that a genetically engineered organisms could escape from the laboratory and endanger the plants already in the world.
- 9. Pharmaceutical companies are creating drugs to cure inherited diseases, as well as vaccines that will protect people against diseases such as smallpox, malaria, and new diseases that will arise in the coming biotech century.

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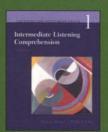
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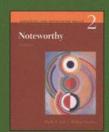
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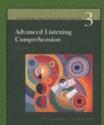
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